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# THESIS

QUALITY ASSURANCE IN DOD PERSONAL  
PROPERTY MOVEMENT: CARRIER EVALUATION  
AND CONTROL

by

Robert David Bechill

June 1989

Thesis Advisor:

Dan C. Boger

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Quality Assurance in DOD Personal Property Movement:  
Carrier Evaluation and Control

by

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requirements for the degree of

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## ABSTRACT

This thesis discusses the history, development, and current status of the Carrier Evaluation and Reporting System (CERS). The Carrier Evaluation and Reporting System is the primary quality assurance system used by Department of Defense personal property activities to evaluate and monitor the performance of domestic personal property carriers. Deficiencies in past and current CERS programs are identified and recommendations are provided for improving the CERS program in use today. Several alternative systems are proposed which if implemented will assist DOD personal property managers in making selection decisions for the personal property carrier that will provide the best possible service to the military member.

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## I. INTRODUCTION

### A. OBJECTIVE OF THE STUDY

Moving in the military can be a traumatic experience. The prospect of finding a new home, learning a new job, and developing new friendships can take its toll on any military service member. The strain can be compounded if poor moving service is provided.

Since the early 1930s, moving the military has been the responsibility of local, national, and international private moving and storage firms who have entered into moving contracts with the Department of Defense (DOD) [Ref. 1:p. 1]. The primary responsibility of military personal property managers is to ensure that quality moving service is provided by these moving firms.

The primary objective of this thesis is to examine the Carrier Evaluation and Reporting System (CERS), the main quality assurance tool available to military personal property managers to evaluate and control service provided by domestic (continental United States and Alaska) private carriers and freight forwarders. Once an analysis of CERS is complete, recommendations will be offered on ways to strengthen CERS.

The Carrier Evaluation and Reporting System is a quality assurance system designed to evaluate the performance of all domestic interstate and intrastate Code 1 (van service) and

Code 2 (container service) shipments. The program's intent is to "establish reasonable performance standards for evaluating all domestic carriers." All domestic shipments are evaluated using CERS. Data collected by CERS forms the basis for carrier evaluation and subsequent traffic distribution for all DOD personal property activities. [Ref. 2:pp. 2-39]

## B. RESEARCH QUESTIONS

The primary research question and the focus of this thesis is:

How can the Carrier Evaluation and Reporting system be improved?

To answer the primary research question, five subsidiary research questions are developed:

1. What are the major criticisms of the CERS program?
2. What are the recommendations of DOD personal property managers for improving CERS?
3. What are the recommendations of the moving industry for improving CERS?
4. What programs do private firms and other public agencies use to evaluate contracted moving service?
5. What new domestic quality assurance initiatives are being proposed to improve CERS and service provided by the moving industry?

## C SCOPE AND ASSUMPTIONS

This research will concentrate on the evaluation and reporting systems used by the Department of Defense to

determine service levels for domestic Codes 1 and 2 Through Government Bill of Lading (TGBL) moves. Carrier evaluation on the international level, the International Carrier Evaluation and Reporting System (ICERS) will not be evaluated; however, the ICERS program will be briefly examined to determine if parts of this program may be useful for inclusion in the domestic program. Domestic Do-It-Yourself (DITY) moves, Direct Procurement Method (DPM), and Unaccompanied Baggage (UB) move evaluation procedures will not be examined.

Throughout this thesis, it is assumed that the reader has a basic working knowledge of the military moving process. A glossary and listing of acronyms are available (Appendices A and B) to assist the reader in understanding key terms and acronyms used by DOD personal property managers.

#### D. METHODOLOGY

The primary research methodologies used are an extensive review of relevant literature and a series of semi-structured interviews. Sources used include:

1. The Personal Property Offices at the Naval Postgraduate School and Fort Ord, CA.
2. The Defense Logistics Studies Information Exchange (DLSIE), Transportation Research Information Data Base (TRIS), ABI/INFORM (a business and management data base), and Bibliographies on Logistics and Physical Distribution Management provided by the Council of Logistics Management.

3. The Dudley Knox Library at the Naval Postgraduate School and the University of California (Berkeley) Transportation Studies Library.

In addition, various professional and trade publications were consulted. These sources of information are contained in the List of References and Bibliography sections of this thesis.

The following groups/individuals were contacted and provided material for this thesis:

1. Military points of contact: Military Traffic Management Command (MTMC) Headquarters, Military Traffic Management Command Western Area (MTMCWA), Naval Supply Systems Command (SUP 053), Headquarters United States Air Force (Directorate of Personal Property), the Transportation Management Schools at Fort Eustis (USA), San Antonio (USAF), and Oakland (USN), and the Household Goods section heads and/or Quality Control/CERS personnel at 26 DOD personal property activities.
2. Moving and storage industry points of contact: the American Moving Council (AMC), the Household Goods Carriers' Bureau, the Household Goods Forwarders Association: Allied, Atlas, North American, and United Van Lines; and four local (Monterey, CA) carriers. All local carriers requested that their names remain confidential. For the purpose of this thesis, local carrier comments will be referenced as "local carrier."
3. Private firms and other public agency points of contact: the Employee Relocation Council, relocation managers from International Business Machines (IBM), General Motors (Argonaut Realty), Welchs' Foods, Bristol-Myers, Tenneco, Minnesota Mining and Manufacturing (3M), Boeing, Hewlett-Packard, the General Services Administration, and the Department of General Services for the State of California.

#### E. LIMITATIONS

Interviews with moving experts were the major source of information for this thesis. This method was selected by the

author to elicit a wide variety of recommendations for improving the CERS program. There are a number of limitations to the approach. The major limitations as noted by Julian L. Simon in his book Basic Research Methods in Social Science are [Ref. 3:pp. 272-293]:

1. Observer Variability: inability of the observer to repeat a discussion again and again. No recording devices of any kind were used during the interviews. Every effort was made by the author to gather and summarize accurately pertinent information during all interviews.
2. Observer Bias: tendency to observe a phenomenon in a manner that differs from the "true" observation. Most researchers are biased in one direction or another. This researcher was biased toward the service member; however, to the extent possible, the researcher attempted to be self-conscious of his bias throughout the interview process.
3. Reluctance by interviewees to answer certain questions: the moving and storage process as it pertains to DOD personal property movement occurs in a politically charged atmosphere. Several respondents desired that their names and comments remain anonymous for fear, real or imagined, of reprisals. This request for anonymity was honored by the researcher.

## F. ORGANIZATION

Chapter II discusses early carrier evaluation programs and Department of Defense policies that contributed to the development of the current Carrier Evaluation and Reporting System.

Chapter III describes, in detail, the Carrier Evaluation and Reporting System presently being used by DOD personal property activities. Included in this chapter is how traffic



is allocated using CERS scores and other quality assurance programs available to control service provided by carriers.

Chapter IV presents and analyzes several tables and charts depicting CERS performance from May 1984 to April 1988. The material in Chapter IV was derived from CERS II performance data (CERS II is an automated program at MTMC Headquarters that summarizes CERS data) and actual loss and damage claim information provided by MTMC.

Chapter V presents findings by the author concerning the current status of CERS and related carrier control initiatives. Specifically, this chapter will identify the major deficiencies of the current Carrier Evaluation and Reporting System and recommendations for improvement.

Chapter VI presents major conclusions and recommendations by the author based on the research results. Chapter VI concludes with suggestions of areas for further research.

## II. BACKGROUND--EARLY CARRIER EVALUATION SYSTEMS

### A. INTRODUCTION

This chapter will discuss early carrier evaluation programs and Department of Defense policies that contributed to the development of the current Carrier Evaluation and Reporting System. To comprehend the current CERS program, it is important to understand the types of carrier evaluation programs and moving policies that previously existed.

### B. CARRIER EVALUATION 1946-1970

The beginning of a nationwide carrier evaluation program can be traced back to the late 1940s and the aftermath of World War II. During this time frame, the federal government passed several pieces of legislation that would have a profound effect on the way the military did business. The most significant pieces of legislation affecting personal property movement were Public Law 604 of 1946, the National Security Act of 1947, and the Career Compensation Act of 1949 [Ref. 4:pp. 10-18].

Public Law 604 instructed the military services to develop uniform moving procedures. Prior to this law, each military service determined its own household goods policy and individually evaluated carriers. While it would take many years before a truly uniform set of procedures would be published, Public Law 604 was Congress' first attempt to

formalize the requirement for uniform moving procedures among the military services. [Ref. 4:p. 9]

The National Security Act of 1947 established the Department of Defense. Among its many charters was the requirement to eliminate unnecessary duplication and overlap in military procurement and transportation (this included household goods shipments). [Ref. 4:p. 18]

The Career Compensation Act of 1947 provided the Armed Forces with authority to move military personnel's household goods; also it required that a uniform policy be established for all services governing personal property shipments. In addition, this act recognized the need to provide "high quality moving services as one means to maintain first class personnel." [Ref. 4:p. 18]

When taken in combination, the acts described above eventually formed the basis for a centralized military agency to procure and evaluate carrier industry services on a nationwide basis [Ref. 4:pp. 16-17]. However, it would be many years before uniform household goods' management would become a reality.

The first major step toward actual uniformity occurred with the formation, within the Office of the Secretary of Defense, of the Military Traffic Service (MTS). The Military Traffic Service was responsible for developing a household goods policy for all the services. Working in conjunction with representatives from the moving industry, the MTS

developed several DOD instructions to govern household goods traffic management. Of particular importance was DOD Instruction 4500.13. [Ref. 5:p. 9]

Issued in 1955, DOD Instruction 4500.13 outlined household goods management procedures for local personal property shipping offices. Basically, this document described when commercial van service could be used, how carrier selection was to be accomplished, and the costs of van services to the government. However, development and implementation of quality assurance programs, including programs to evaluate and select carriers, were left up to each installation transportation officer (ITO). The instruction only stipulated that carriers be able to perform the required service in a satisfactory manner. Because DOD Instruction 4500.13 did not establish clear quality assurance guidelines, early carrier evaluation programs revolved around the personal expertise of each transportation officer and feedback from military personnel. [Ref. 5:p. 9]

In 1956, the Department of Defense sought to centralize management of all land traffic (including the household goods program) under one agency: the Military Traffic Management Agency (MTMA). When it was created, the MTMA charter (DOD Instruction 4500.14) was not clear as to the single manager's responsibility in managing personal property. In 1957, the Assistant Secretary of Defense (Shipbuilding and Logistics) issued clarification stating that the MTMA was to assume full

traffic management responsibility for household goods. In response, the MTMA published in March of 1958 Chapter 217 of the Military Traffic Management Regulation. Chapter 217 described the single manager's roles and responsibilities in managing personal property and provided for the continuing use of existing individual services' regulations until a detailed Military Traffic Management Regulation could be published. [Ref. 5:p. 11]

Shortly thereafter, the MTMA attempted to publish a revised version of Chapter 217. Chapter 217 incorporated some controversial provisions that were immediately challenged by the moving industry. As a result, the Secretary of Defense (S&L) called for a full scale review and preparation of a new directive [Ref. 5:p. 12]. On December 8, 1959 the MTMA published Department of Defense Directive 4500.26. Key provisions of this new directive were [Ref. 5:p. 12]:

1. Traffic would be distributed among qualified carriers affording the lowest total cost to the government. Primary consideration would also be given to the quality of service instead of accepting barely satisfactory service.
2. The service member would be allowed to select the carrier he or she wanted as long as the carrier was in the low cost group. The member could also refuse a specific carrier based on previous unsatisfactory service.
3. The transportation officer was granted authority to suspend carriers for unsatisfactory performance.

Carrier evaluation under DOD Directive 4500.26 was accomplished as it had been in the past: on an installation-by-installation basis. Service quality would be evaluated through [Ref. 5:p. 14]:

. . . reports of inspection of carrier facilities and equipment, service practices, performance reports by military and civilian personnel, official reports of regulatory bodies, and claims for loss and damage.

In addition to the guidance provided above, carriers could be suspended if they failed to meet the requirements of the directive or if carriers committed unethical acts. The directive also contained a provision for rewarding carriers with bonus tonnage for providing "exceptionally high quality" moving service. Unfortunately, the directive never adequately defined how "exceptionally high quality" moving service was to be measured. This provision became highly controversial because what constituted quality moving service varied from one installation to another. Eventually, this provision was dropped in favor of a punitive policy which suspended or disqualified carriers for poor performance. [Ref. 5:p. 14]

DOD Directive 4500.26 faced strong opposition from one particular section of the carrier industry: small carriers. Banding together as the Movers Committee for Equitable Distribution of Government Traffic, this group opposed the directive citing that the large advertising capability of the "Big Four" carriers (Mayflower, Allied, North American, and

United) would unfairly influence service members and eventually force small carriers out of business. Large and small carriers each had their own supporters in Congress, and the issue became a "political football drawn along party lines in a classic confrontation between large and small business." [Ref. 5:p. 13]

Submitting to pressure from both the Congress and the moving industry, the Assistant Secretary of Defense (S&L) suspended DOD Directive 4500.26 and convened an ad hoc committee of military and moving industry representatives to work out a new compromise directive [Ref. 5:p. 13]. This committee was able to work out a compromise and promulgated DOD Directive 4500.27 (1 July 1960). This new regulation eliminated the provision that a service member could select his or her own mover. It was replaced with language that stated [Ref. 5:p. 13]:

An owner of household goods could express a preference for a carrier which might be honored by the Transportation Officer if all other factors such as quality service and equitable distribution [of traffic] could be observed.

Carrier evaluation and control remained a local installation responsibility.

Thus, even though the Department of Defense and the Military Traffic Management Agency made significant progress by 1970 towards centralizing household goods management, little had changed so far as quality assurance programs were concerned. Carrier evaluation and other quality assurance

programs continued to be developed on a installation by installation basis within existing DOD guidelines. Carrier performance was usually monitored by the origin transportation office on the basis of its own observations and/or feedback from destination personnel and the service member. Quality assurance was based on a system of punitive actions (warning, suspensions, and disqualifications) for poor performance [Ref. 5:p. 30]. Clearly, a new system was needed to evaluate overall performance of carriers on a nationwide basis.

#### C. THE WORLDWIDE HOUSEHOLD GOODS INFORMATION SYSTEM (WHIST)

The Worldwide Household Goods Information System for traffic management was the first attempt to establish a uniform nationwide system for gathering information on carriers. Developed by the Military Traffic Management and Terminal Services (the successor to the MTMA) in 1966 and implemented in 1970, WHIST's primary objective was to provide the "most accurate personal property information and data possible" to the military's personal property managers. [Ref. 6:p. 23].

The Worldwide Household Goods Information System gathered data from personal property activities and grouped the results into 15 subsystems. See Figure 1. These results could later be used by local and, for the first time, national personal property managers to select, evaluate, and



control services provided by the moving industry. The primary carrier evaluation and control subsystems of WHIST were [Ref. 7:p. 19]:

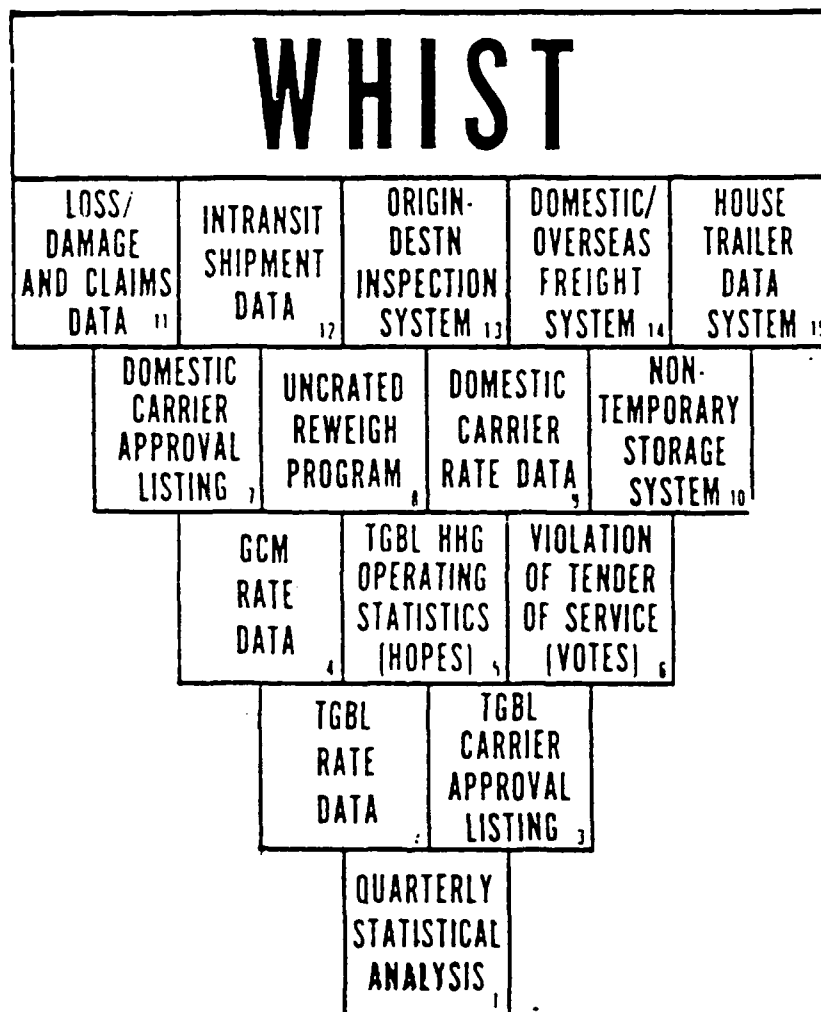


Figure 1: Worldwide Household Goods Information System for Traffic Management (WHIST) [Ref. 7:p. 18]

1. TGBL Household Goods Operating Statistics (HOPES): HOPES was designed to evaluate TGBL carrier performance, transit times, and preferred arrival dates. Summary data was arranged to permit evaluation of carrier performance by all management levels from major command to installation.
2. Violation of Tender of Service (VOTES): VOTES was designed to identify carriers who had been warned or suspended. It permitted the consolidation of all local warnings, suspensions, and other actions taken by the ITO against a carrier.
3. Domestic Carrier Approval Listing: This system provided all installations with a listing of domestic carriers approved for use. It eliminated the need for furnishing carrier approval information to installations by correspondence.
4. Non-temporary Storage System: This system provided data on use and availability of household goods storage facilities. The system also monitored fire prevention in these facilities.
5. Loss/damage and Claims Data: This system provided loss and damage information. Data fields included information on causes of loss and damage, number of loss and damage claims, and amounts of claims on a carrier by carrier basis.
6. Origin-Destination Inspection System: This system was designed to capture quality control information from both origin and destination sources. Its primary use was to evaluate carrier performance with respect to 32 different quality control items.

Despite the efforts of the WHIST Project Management team, it soon became evident that WHIST was not working as planned. The main problem was the time lag between the actual move and the receipt of input documents. In most cases it would be months or possibly years before various documents that could be used to evaluate a move (e.g., damage claims) would be matched in the subsystems. [Ref. 8]

In 1974, the General Accounting Office (GAO) found that WHIST reports generated little, if any, valuable information that could be used to evaluate carriers. The General Accounting Office further stated that the reports were of little value "because information was incomplete, inaccurate, and untimely." [Ref. 9:p. 1]

In addition to GAO criticism, the summer of 1973 produced one of the worst moving cycles, in terms of service, since the Military Traffic Management Command (the successor to the MTMA and MTMTS) began keeping records of household moves. In that summer, over 60,000 military families experienced unsatisfactory moves. The effect on morale was noticeable and pointed to a need for a new and reliable system to evaluate and control carrier performance. As a result of the GAO report and the summer of 1973, MTMC decided to discontinue WHIST as a quality assurance program in 1975. [Ref. 10:p. 2]

The Worldwide Household Goods Information System was not dropped completely. It is still primary automated management information system used to gather information for DOD's personal property program. [Ref. 11:p. 6]

#### **D. THE INITIAL CARRIER EVALUATION AND REPORTING SYSTEM**

In response to the failure of the WHIST program, MTMC conducted an intensive program management review of the carrier evaluation process. By the summer of 1974, personal

property management specialists at MTMC began to assemble a comprehensive plan for carrier evaluation. This plan would become the Carrier Evaluation and Reporting System or CERS. [Ref. 10:p. 2]

The primary goal of the initial CERS program was to improve moving service quality for the military. To achieve this goal, the initial CERS program had two operational objectives [Ref. 6:p. 32]:

1. To provide for an objective, local evaluation of performance, and to report this evaluation to a centralized collection point.
2. To recognize and reward better carriers while denying traffic to those carriers who did not meet minimum standards.

The Carrier Evaluation and Reporting System was a significant departure from previous DOD policy. Instead of a program that was punitive in nature, as most installation quality assurance programs had been, the CERS program was designed around a system of incentives. If quality service was provided by the carrier, that carrier would be "rewarded" with more traffic in a subsequent period. Punitive actions (letters of warning, suspensions, disqualifications) were not eliminated. If a carrier failed to meet minimum acceptable standards of service, MTMC and ITO's still had the option to take punitive action against that carrier. [Ref. 10:p. 3]

Work continued on the development of CERS throughout the summer and fall of 1974. At every significant step of the development process, input was sought from the services, the

moving industry, and transportation officers from eleven test sites. In May 1975, the eleven test sites began to collect performance data on carriers serving those installations. Based on results from the test sites and after several modifications, MTMC in November 1977 instituted the Carrier Evaluation and Reporting System for all domestic personal property activities. [Ref. 10:p. 3]

#### 1. The Initial CERS Program

The initial CERS program was studied in detail in 1983 by Major Andrew Figueroa, United States Army Transportation Corps in his thesis "An Analysis of the Department of Defense Carrier Evaluation and Reporting System." What follows is a description of the initial CERS program that was contained in Major Figueroa's thesis [Ref. 6:pp. 24-35].

Under the initial CERS program, the year was divided into two six-month performance cycles: May 1 to October 31 and November 1 to April 30. All domestic code 1 (van service) and code 2 (container service) shipments moved by household goods carriers and forwarders were scored.

The primary document used to score shipments was the Shipment Evaluation and Inspection Record--DD Form 2223. Input for the DD Form 2223 was derived from a combination of on-site inspections by government personal property inspectors, member feedback, and administrative documentation.

The origin shipping office completed the data in the top section of the DD Form 2223, noted any service failures observed during pickup, and forwarded the form to the responsible destination shipping office. The destination office was responsible for completing the rest of the form for those service failures that were observed at destination. Upon completion, the DD Form 2223 was forwarded back to the origin shipping office along with the member's Customer Satisfaction Report--DD Form 1781. The origin shipping office would then determine a carrier's performance score based on the results from the DD Form 2223, the DD Form 1781, and local inspection reports.

Performance factors considered were on-time pickup and delivery, absence of loss and damage, customer satisfaction (from the DD Form 1781), and shipment handling and administrative (tender of service) violations.<sup>1</sup> Each of these performance standards had maximum point totals assigned to quantify the shipment results. The point totals were:

- |                           |                   |
|---------------------------|-------------------|
| a. On-time pickup         | 10 points maximum |
| b. On-time delivery       | 40 points maximum |
| c. Absence of loss/damage | 30 points maximum |

---

<sup>1</sup>The tender of service is the basic service agreement between the shipper (in this case the military) and the carrier. Among other things, the tender of service defines what types of moving services the government requires a carrier to furnish. The tender of service specifies standards for packing, loading, documentation, transportation, storage, and reporting requirements.

- |  |                          |
|--|--------------------------|
| d. Customer satisfaction                           | 40 points maximum        |
| e. Compliance with tender<br>of service violations | <u>80 points maximum</u> |
| Total  | 200 points <sup>2</sup>  |

At the end of each six month reporting period, the average scores on the individual DD Form 2223s were posted to the Carrier Evaluation Worksheet/Report--DD Form 2224 for each carrier. Penalty points (points deducted in each performance factor) earned on shipments were totaled. Eighty penalty points were awarded for each shipment refusal and eighteen penalty points were awarded for each shipment overbooking. The carrier's Average Shipment Score was then computed using the following formula:

$$\frac{(100 - \frac{\text{total penalty points}}{n})}{n} = \text{Ave. Shipment Score}$$

(n being the total number of shipments scored in a reporting period for that carrier.)

The carrier's new Composite Performance Score was then computed by the following data adjustment equation:

$$\frac{(\text{Old Composite Performance Score} \times 0.6) + (\text{Average Shipment Score} \times 0.4)}{\text{New Composite Performance Score}}$$

All carriers who achieved a new Composite Performance Score of at least 50 were then ranked based on the new performance

---

<sup>2</sup>While 200 penalty points were possible under the initial CERS program, the resulting total number of points was subtracted from 100 with the caveat that a single shipment could not score less than zero.

score. Based on the Composite Performance Scores, carriers were placed into one of four performance ranges:

- a. Superior. Top ten percent of all carriers with Composite Performance Scores of 50 or better. All other factors remaining equal, superior performers were to receive twice as much traffic as competing standard performance carriers.
- b. Excellent. The next 30 percent of carriers with Composite Performance Scores of 50 or better. These performers would receive one and one half times as much traffic as competing standard performance carriers.
- c. Standard. The remaining sixty percent of carriers with Composite Performance Scores of 50 or better.
- d. Unsatisfactory. Carriers who failed to achieve a Composite Performance Score of at least 50 would be placed in a mandatory period of traffic denial.

The performance ranges described above were important since they partially determined the amount of household goods traffic that would be distributed in a subsequent traffic distribution period.

However, the primary consideration was that traffic would be allocated first to carriers representing the lowest rate level. For example, Carrier A handled ten shipments during the performance period and achieved an overall superior ranking. Carrier B handled ten shipments and achieved an overall excellent ranking. In the next period, Carrier B submitted lower rates than Carrier A. Carrier B was awarded traffic before Carrier A. If the low rate level had several carriers, then traffic would be allocated according to performance ranges and scores within those ranges. As will be seen in later chapters, traffic is still



allocated in much the same manner, i.e., price is the single most important determinant used by the traffic manager in awarding military household goods traffic in subsequent traffic periods.

## 2. Initial CERS Program Criticisms

The system described in the previous section was not without its critics. Among the most vocal were the American Movers Conference (a major moving industry organization that represents movers' interest nationwide and on Capitol Hill) and the General Accounting Office (GAO). Their major criticisms were [Ref. 6:pp. 80-97]:

- a. The American Movers Conference stated that awarding traffic to the lowest rate filer was the most objectionable aspect of the program. Figueroa in his analysis reported that there was substantial evidence to back up this criticism. "Cut rate" carriers were effectively undermining the intent of the CERS program to award traffic based on performance. The GAO also concluded that awarding shipments by cost over quality limited CERS effectiveness. In the GAO study, 30 to 99 percent of all shipments at various installations were awarded to cut rate carriers.
- b. The General Accounting Office stated that while the cost of quality control had increased (GAO estimated the cost of CERS to be three million dollars annually), they could not determine if service quality had improved because of CERS. Damage claim data collected by Figueroa supported the GAO finding. There was no discernable change in the number or amount of claims as a result of CERS.
- c. The American Movers Conference and the General Accounting Office stated the evaluation process was unreliable. Among the major criticisms in this area were:
  1. Evaluations were often incomplete resulting in inflated scores. The General Accounting Office found that only ten to twenty percent of all

shipments received thorough inspection vice the required 50 percent. This inflated CERS scores since any part of a shipment not evaluated received full scoring credit.

2. Inspection selection was statistically biased. Inspected shipments were not selected on a random basis. For example, some lower ranked carriers were inspected more frequently than others.
  3. Member evaluations were inadequate. The return rate of the DD Form 1781 at most installations was less than 30 percent. Even when forms were returned, many evaluations were ignored or even changed by the evaluating activity. The overall effect was inflated scoring.
- d. The General Accounting Office found that CERS' complexity caused confusion and that implementation of CERS varied from installation to installation. The DD Form 2223 graded carriers on 33 different scoring elements (22 tender elements, eight customer service elements, on-time pickup, on-time delivery, and loss and damage). The administrative burden on many personal property offices and the moving industry was immense. In addition, the GAO found that a wide range of policies and procedures relating to CERS scoring and traffic distribution were in effect at the local level.
  - e. The General Accounting Office found that CERS scores and rankings did not reflect quality of service. The carrier rankings were shown to be arbitrary and not meaningful, i.e., a superior carrier may have been put in that category based on as little as one shipment. In reality, this same carrier may have provided marginal to poor service in the past. In addition, there tended to be very small point differences between carriers, thus making it extremely difficult to separate carriers for traffic allocation purposes.
  - f. The General Accounting Office found that CERS did not work during the peak season. The peak season for household goods occurs from May to October. The General Accounting Office report did not find any evidence to indicate that service during the peak season had improved due to CERS. In fact, the GAO found that some shipping offices would ignore CERS during the peak season in order to award traffic to any carrier that would take it.

Based on GAO and moving industry criticism and feedback from local personal property offices, the CERS program was overhauled in 1983.

## **E. CONCLUSION**

This chapter provided a brief summary of the carrier evaluation programs and significant DOD moving policies in effect prior to the revised CERS program. As late as 1970, carrier evaluation was accomplished by installation transportation officers on an individual basis with little, if any, guidance from higher authority. It was not until the 1970's, with WHIST and then the initial CERS program, that any attempt had been made to evaluate carriers on a nationwide basis. The next chapter will discuss the end result of MTMC's response to GAO and industry criticism of the initial CERS program: the revised Carrier Evaluation and Reporting System.

### III. THE PRESENT CARRIER EVALUATION AND REPORTING SYSTEM

#### A. INTRODUCTION

Bowing to internal pressure (many ITOs voiced considerable criticism of the initial CERS program) and external pressure, the Military Traffic Management Command in 1984 overhauled the Carrier Evaluation and Reporting System. This chapter describes how the current CERS program functions and how traffic is allocated using CERS scores and reviews other quality assurance programs available to control service provided by carriers.

#### B. THE CARRIER EVALUATION AND REPORTING SYSTEM

##### 1. General

The instructions for the CERS program are located in the "bible" of DOD personal property movement: DOD Instruction 4500.34R--The Personal Property Traffic Management Regulation or more commonly known as the PPTMR. What follows is how the current CERS program works as described in the PPTMR [Ref. 2:pp. 2-39 to 2-48].

The revised CERS program's primary purpose is to have a quality assurance program that can be used by personal property managers at the local and national level. The Carrier Evaluation and Reporting System is intended to establish reasonable performance standards for evaluating domestic carriers.

All domestic shipments of personal property are evaluated by DOD personal property activities using CERS. Data collection is segregated by code of service (Code 1 for van service and Code 2 for containerized shipments) and by type of domestic traffic (interstate and intrastate). Carrier performance is graded separately in each code of service for each type of domestic traffic. In other words, if a carrier is engaged in both Code 1 and Code 2 service and participates in interstate and intrastate traffic, the carrier is rated separately in each code for both interstate and intrastate traffic.

The performance year is divided into two six-month performance periods. The performance periods are:

<u>Performance Period</u>	<u>Cut-off Date</u>	<u>Actual Performance Period</u>
1 May-31 October	15 September	16 March-15 September
1 November-30 April	15 March	16 September-15 March

Because destination feedback may not be available for weeks or possible months, there is a carry-over of shipment data limited to 12 months beyond the cut-off date. This carry-over is allowed in order to score all shipments a carrier moves and to allow time for receipt and processing of input data by the ITO. If complete performance data has not been received by the origin ITO within 12 months, the shipment is scored based on data available. If no reports are received,

the carrier will receive full credit for all scoring elements.

## **2. The Shipment Evaluation and Inspection Record**

Carrier performance is rated using the Shipment Evaluation and Inspection Record--DD Form 2223. See Figure

2. DD Form 2223 serves several distinct purposes. It functions as:

- a. A document for total points earned on individual shipments.
- b. A checklist for recording shipment deficiencies.
- c. A notification to the carrier and ITO of the carrier's performance on individual shipments and of the carrier's relative success or failure in meeting DOD performance standards.

The DD Form 2223 is initiated at the origin shipping office, forwarded to the destination transportation office where end move information is annotated, and then returned to the origin shipping office. When the completed DD Form 2223 is returned to the origin shipping office, a copy is furnished to the carrier's home office. Thus, carriers receive feedback on each move. If a carrier feels that the move was not fairly scored, there is a formal appeal process that the carrier can initiate.

## **3. Scoring and Non-Scoring Elements**

Carrier performance evaluation is accomplished through two separate processes: scored and non-scored elements. The three elements scored under revised CERS are on-time pickup, on-time delivery, and absence of loss and

SHIPMENT EVALUATION AND INSPECTION RECORD				1. DATE (Y-M-D)	2. CARD IDENTITY (1-2)	REPORTS CONTROL SYMBOL MTMC 134 (R3)	
3a. MEMBER'S NAME (Last, First, M.I.)		b. RANK		4a. CARRIER'S NAME		b. SCAC	
5a. NAME OF ORIGIN SHIPPING OFFICE		b. GBLOC		6a. NAME OF DESTINATION SHIPPING OFFICE		b. GBLOC	
c. ADDRESS (Same, zip code)				c. ADDRESS (Same, zip code)			
7. PICK UP ADDRESS (Street, city, state)				8. DELIVERY ADDRESS (Street, city, state)			
9. PICK UP DATE (Y-M-D)	10. REQUIRED DELIVERY DATE (Y-M-D)	11. CODE OF SERVICE (7)		12. DESTINATION STATE		13. INTER-INTRA (8)	
14. PPGBL NUMBER (9-17)	15. S.I.T. NUMBER	16. DATE IN (Y-M-D)		16. DATE OUT (Y-M-D)		18. DELIVERY DATE (Y-M-D)	
I. SHIPMENT SCORING a. Failure to pick up on agreed date (Para 41.a) <input type="checkbox"/> c. Loss or damage estimate (para 37) Less than \$500 <input type="checkbox"/> \$500 or over <input type="checkbox"/>							
b. Failure to meet required delivery date (para 41.a; 48) 1-2 Days <input type="checkbox"/> 3-5 Days <input type="checkbox"/> 6-9 Days <input type="checkbox"/> 10 Days or over <input type="checkbox"/>							
OTHER VARIABLES				MISSED RDO			
				0 Days	1-2 Days	3-5 Days	6-9 Days
Met pick up and no loss/damage				100	92	83	75
Met pick up but loss/damage under \$500				93	85	77	68
Met pick up but loss/damage \$500 or more				67	58	50	42
Missed pick up but no loss/damage				67	58	50	42
Missed pick up and loss/damage under \$500				60	52	43	35
Missed pick up and loss/damage \$500 or more				33	25	17	8
SHIPMENT SCORE (as determined from above table)							
H. CUSTOMER SATISFACTION				YES <input type="checkbox"/> NO <input type="checkbox"/> NO RESPONSE <input type="checkbox"/>			
III. SHIPMENT EVALUATION							
ORIGIN		YES		NO		DESTINATION	
						YES	
						NO	
Made premove survey (if applicable) (para 41.a)						Notified destination ITO in advance of inability to meet RDO (para 41.a)	
Used proper/sufficient packing material/equipment (para 43, 43, 44, 49)						Notified destination ITO of arrival delivery (para 41.a, d)	
Prepared inventory properly (para 54)						Recorded loss/damage during unloading/unpacking (para 38)	
Prepared DO Form 619 properly (para 23)						Prepared DO Form 619 properly (para 23)	
Used qualified personnel (para 47)						Used qualified personnel (para 47)	
Property serviced appliances (para 44 b, d)						Property serviced appliances (para 44 b)	
Rolled rugs properly; did not fold (para 36 d; 44 j)						Rugs were rolled properly; not folded (para 36 d; 44 j)	
Weighed shipment in manner prescribed by ICC (para 30.g)						Reweighed shipment when as requested (para 30.g)	
Removed packing material and other debris (para 80)						Unpacked, reassembled and removed packing debris (para 37)	
Provided required documents to ITO/member within time specified (para 18: 28: 32: 33 a)						Provided required documents to ITO/member within time specified (para 18: 28: 32: 33 a)	
Containers were properly marked and protected from the weather (para 40 a(1), (2); 40 b, c, d, e)						Containers were properly marked and protected from the weather (para 40 a(1), (2); 40 b, c, d, e)	
PPB&I was packed, weighed and entered on inventory and G&I (para 84 g)						Complied with storage in transit requirements (para 31: 36 a, b, c, d(1), (2))	
REMARKS (Include any additional violations)				REMARKS (Include any additional violations)			
SIGNATURE OF SHIPPING OFFICE REPRESENTATIVE				SIGNATURE OF SHIPPING OFFICE REPRESENTATIVE			
DATE (Y-M-D)				DATE (Y-M-D)			
SIGNATURE OF SHIPPING OFFICE REPRESENTATIVE				THIS SERVES AS A LETTER OF WARNING <input type="checkbox"/>			
DATE (Y-M-D)							

DD Form 2223, MAR 82

PREVIOUS EDITION IS OBSOLETE

Figure 2: Shipment Evaluation and Inspection Record--  
DD Form 2223 [Ref. 2:p. 2-55]

damage. The Military Traffic Management Command considers these elements to be the most important in any move and thus the basis for determining carrier performance during a reporting period. The Military Traffic Management Command has established the following goals for these three performance elements:

On-time pickup	95% of all shipments will be picked up on time.
On-time delivery	90% of all shipments will be delivered on time.
Absence of loss/damage	70% of all shipments will not experience any loss or damage.

Referring to Figure 2, the three scored elements are located in Section I--Shipment Scoring, followed by a scoring element matrix, and two blocks for origin and destination tender of service violations.

Unlike the initial CERS program, the revised CERS program does not score tender of service or customer service elements. These areas are examined but not scored. As stated in Chapter II, scoring tender of service and customer service violations proved too overly complex and too subjective for most ITOs to adequately manage.

#### 4. Carrier Scoring Philosophy

Carrier scoring is based on a positive approach. Carriers start with zero points on a shipment and earn points based on their compliance with the performance elements. Equal weighting is given to all three scored performance



elements. On-time pickup, on-time delivery, and absence of loss and damage all can earn a maximum of 33.3 points for a total of 100 points. Scores are rounded up to ensure that 100 points, not 99.9 points can be achieved. What follows is a description of how each performance element is scored.

**a. On-time pickup**

For on-time pickup, a carrier earns 33.3 points. For late pickup, no points are earned. The tender of service (Appendix A of the PPTMR) states that pickup will take place on the date(s) previously arranged between the ITO and the carrier. Pickup will not begin prior to 0800 or after 1700 without the prior approval of the ITO and the service member. In addition, the carrier must be able to complete the pickup by 2100. Thus, if a carrier did not arrive until 1600 and did not complete the pickup until 2300 (assuming a one day pickup requirement), the carrier would earn zero points for this performance element. The major sources of input for this performance element are origin inspections and feedback from the service member.

Missing the pickup date may cause extreme hardship and inconvenience to the service member. Delay caused by late pickup may force the member to cancel previously arranged travel plans, arrive late at his or her new duty station, and/or cause additional financial hardship to the member and the government in the form of added temporary housing and per diem costs. Thus, MTMC has

essentially established a "no tolerance" rule for this performance element.

Additionally, carriers refusing to pick up a shipment because they over booked themselves will automatically be awarded a total CERS score of 33 points. In personal property language, this is called a "turned-back" shipment. A DD Form 2223 will be sent to the carrier's home office with remarks section containing a statement that the shipment was scored as a turned-back shipment.

**b. On-time delivery**

For on-time delivery, a carrier earns a decreasing number of points based on extent of delay. Points are awarded as follows:

No delay	33.33 points
1-2 days' delay	25.00 points
3-5 days' delay	16.66 points
6-9 days' delay	8.33 points
10 days' delay	0 points

The major source of input for this performance element are destination inspections and feedback from the service member. In addition, shipments are also graded going into or out of storage-in-transit (SIT). For example, if a carrier does not deliver a shipment to the designated SIT site by the agreed upon date, the shipment will be scored as having missed the required delivery date (RDD).

**c. Absence of loss and damage**

For loss and damage, points are awarded as follows:

No damage	33.33 points
Less than \$500	26.66 points
\$500 or more	0 points

Since October 1, 1988, the Joint Statement of Loss and Damage at Delivery--DD Form 1840 is the primary document for determining loss and damage amounts. See Figure 3. At time of delivery, the carrier and the member fill out this form noting any loss or damage by item in block 13. Block 14c is used to estimate the total amount of loss and damage and will be used as the loss and damage estimate for the DD Form 2223. If loss/damage is indicated in block 13, but there is insufficient data to develop an estimate (i.e., block 14c is blank), the origin ITO will indicate a dollar amount of under \$500 (26.66 points awarded) on the DD Form 2223. Other documentation such as the Government Inspection Report--DD Form 1841 (the ITO's inspection of loss and damage--required for damage claim adjudication) can be used at the ITO's discretion to estimate loss and damage. If loss or damage is based on documentation other than the DD Form 1840, a notation must be made in the remarks section of the DD Form 2223.



Prior to October 1988, the primary input document for loss and damage estimates was the Customer Satisfaction Report--DD Form 1781. This form was dropped in favor of the DD Form 1840 due to poor return rates (as low as 10% at some installations) and ambiguity of answers (a member would estimate damage at \$4,000 to \$5,000 yet be satisfied with mover service). At present (December 1988), the Military Traffic Management Command has no plans to reinstate any form on a nationwide basis to capture customer satisfaction. [Ref. 12]

#### 5. Shipment Scoring

Using the matrix table located in the middle of DD Form 2223 and the results for each scored element, a carrier's shipment score can easily be determined. Figure 4 illustrates the scoring that would occur if the carrier missed both pickup and the delivery date by more than 10 days. A total score of 33 would be given for this shipment. In this example, the DD Form 2223 would serve as documentation for automatic suspension of the carrier. As will be discussed later in this chapter, missing pickup or missing the RDD by ten or more days are grounds for immediate suspension.

#### 6. The Carrier Evaluation Worksheet/Report

At the end of each six month period, data from individual 2223s are consolidated on to the Carrier



**Evaluation Worksheet/Report--DD Form 2224. See Figure 5.**

CARRIER EVALUATION WORKSHEET/REPORT							REPORTS CONTROL SYMBOL HTUC SYMBOL:		PAGE <u>1</u> OF <u>1</u> PAGES
1A NAME OF CARRIER <u>Careful Van Lines</u>						2. SCAC <u>CARE</u>		3 CODE OF SERVICE <u>I</u>	
B MAILING ADDRESS (Street, City, State, ZIP Code) <u>202 Careful Way / Denver CO 84321</u> <u>GLO</u>						4. NAME OF ORIGIN SHIPPING OFFICE			
5. PLANS COVERED		6. INTERSTATE		<input checked="" type="checkbox"/>		7 NUMBER OF SUSPENSIONS			
FROM (LINE) TO (FORM)		D. INTRASTATE				F REGULAR		G IMMEDIATE	
B	A	T	T	87/3	87/9				
PROPERTY OWNER'S NAME (Last, First, MI)			POOL NUMBER			MISSED DELIVERY DATE		LIT. DAMAGE	
Simpson, Willie			AP 1 2 3 4 5			✓		✓	
Daniels, John			AP 1 2 4 4 1			✓		✓	
Stone, David			AP 6 2 4 3 1						
Lula, Hal A.			AP 9 B 7 6 5			(Turned/Pulled Back)		33	
"LAST SHIPMENT ENTRY"						Note: Choose One			
TOTAL						1		1 292	
ANY SHIPMENTS ON WHICH EVALUATIONS HAVE NOT BEEN COMPLETED HAVE BEEN EXCLUDED IN COMPUTING YOUR AVERAGE SHIPMENT SCORE.						NUMBER OF SHIPMENTS SCORED <u>4</u>		AVERAGE SHIPMENT SCORE <u>73.00</u>	
NAME OF SHIPPING OFFICE REPRESENTATIVE <u>I. Gotcha</u>						SIGNATURE OF SHIPPING OFFICE REPRESENTATIVE <u>L. Gotcha</u>		DATE (Y, M-DAY) <u>87/09/18</u>	
DD FORM 2224						PREVIOUS EDITION IS OBSOLETE			

**Figure 5: Carrier Evaluation Worksheet/Report--  
DD Form 2224 [Ref. 2:p. R-9]**

This form is designed to serve as:

- a. A work sheet that can be used by the origin ITO to calculate average shipment scores. Average shipment scores are used by the origin ITO to allocate traffic for the next six month period.
- b. A document used in reporting carrier performance to Headquarters, Military Traffic Management Command. All carrier performance data must be submitted by 15 November and 15 May to Headquarters, MTMC.

Unlike the initial CERS program, where a carrier's average performance score was determined through a complex data adjustment equation, a carrier's score under the revised CERS program is the simple arithmetic mean (total number of points divided by number of shipments during a reporting period). Carriers must achieve a minimum average performance score of 85. Carriers failing to achieve or exceed this minimum will be considered unsatisfactory and be placed in a traffic denial status for 60 days.

7. Carrier Evaluation and Reporting at the National Level--CERS II

The Carrier Evaluation and Reporting System II is the automated management information system used by Headquarters, MTMC to monitor the CERS program. The system provides data on the performance of all carriers participating in DOD personal property shipments, gives regional and national performance norms by codes of service, and facilitates overall analysis and evaluation of the DOD personal property program. The primary data source for the CERS II program are



the DD Form 2224s that are prepared and transmitted every six months by ITOs. [Ref. 11:p. 6]

This section has described the revised Carrier Evaluation and Reporting System. The revised CERS program essentially streamlined what had been a burdensome management tool. The next section will discuss how CERS scores are used by ITOs to allocate traffic.

### C. THE TRAFFIC ALLOCATION DECISION

The stated goal of the domestic personal property program is [Ref. 2:p. 2-19]:

. . . to award traffic to the carrier that consistently provides quality service at the lowest overall cost [underlines added for emphasis]. To accomplish this goal, domestic HHG traffic distribution is based on both the levels of rates and the quality of each carrier's past performance. Traffic shall be offered only to those carriers maintaining a satisfactory level of performance [a CERS score of at least 85]. The carrier's rate level, the number of qualified carriers serving the installation, and the amount of traffic available for distribution shall determine the amount of traffic offered to each carrier.

The primary document used to allocate traffic under the guidelines stated above is the Traffic Distribution Roster (TDR). See Figure 6. Traffic Distribution Rosters are established for Code 1 and 2 shipments for each destination state and the District of Columbia. If there is more than one rate level to a destination, a separate TDR is required for each rate level. A large installation like Fort Ord, CA can have hundreds or thousands of separate TDRs (TDRs are



3. Carriers having equal average shipments scores are brought forward on the new cycle TDR from low to high tonnage. For example, if Carrier A had 15,000 pounds during the previous cycle and achieved a 100 CERS average shipment score and Carrier B had 12,000 pounds during the previous shipment cycle and also achieved a 100 CERS score, Carrier B is placed on the new TDR first. Carriers having equal average shipment scores and equal tonnage for the last cycle are ranked using a random number table.
4. All tonnage is zeroed out at the start of each new rate cycle. There are two rate cycles: 1 May to 31 October and 1 November to 30 April.
5. Low rate carriers are awarded traffic prior to carriers in the next highest rate level. Other carriers do have the option to "me-too" the rate of the lowest rate filer to a destination. A me-too rate is a rate filed by a competing carrier that is equal to the rate filed by the low rate carrier.
6. Those carriers in a traffic denial status for the first 60 days are not awarded any traffic. At the end of the traffic denial period, carriers are assigned an administrative score of 85 and brought back on to the TDR(s) at the highest cumulative weight of any carrier on the TDR(s).
7. A 20,000 weight differential is established between carriers with the highest and lowest tonnage including those with zero tonnage. In other words, a carrier cannot receive more than 20,000 pounds of traffic within the same rate category until all shipments have been offered to all carriers within that rate category.
8. In a properly maintained TDR, a carrier with a lower CERS score should not have higher cumulative tonnage than a carrier with a higher CERS score, except in those requiring the application of "sound traffic management." Sound traffic management is often exercised by traffic managers to keep imbalances from occurring in the TDR. For example, a traffic manager could award traffic out of sequence to ensure that lower ranked carriers do not receive more tonnage than a higher ranked carrier.
9. Service members may request a particular carrier. Installation Transportation Officers shall honor a member's request if the carrier is in the lowest overall rate group consistent with equitable

distribution and sound traffic management. Equitable does not mean equal. Equitable means a fair and reasonable allocation of traffic by the ITO.

The following example will help clarify the traffic allocation scheme for a typical Code 1 TDR [Ref. 13:pp. 6-10]:

There are seven carriers, A-G, going from Fort Ord, CA to Washington, DC. For the next rate cycle, Carrier A offers the lowest rate. Carriers B through G meet Carrier A's rate. Thus all carriers now offer the same rate for the Fort Ord to Washington, DC move. During the last rate cycle, these seven carriers achieved the following CERS scores and hauled the following tonnage:

<u>Carrier</u>	<u>CERS Score</u>	<u>Tonnage Last Cycle</u>	<u>New Cycle Standing</u>
A	98	18,000 (pounds)	3rd
B	98	12,700	2nd
C	98	10,000	1st
D	92	15,000	4th
E	88	20,000	5th
F	87	17,000	6th
G	85	10,000	7th

The following weights (in pounds) will be awarded:

1. 6,000
2. 8,000
3. 4,000
4. 13,500
5. 3,000 (P)
6. 2,000
7. 7,000
8. 4,000
9. 1,000
10. 6,000
11. 5,000
12. 2,000
13. 8,000
14. 3,000

(Code P on shipment number 5 indicates member preference for Carrier E.)

The carriers are then ranked according to the ranking guidelines previously stated. In this example, the top three carriers achieved identical CERS scores during the previous scoring cycle. Carrier C had the lowest tonnage during the previous cycle and thus earns the number one ranking for the new cycle. The process will continue until all carriers within the same rate category are ranked (see chart on the preceding page).

The next step is to award the first shipment (6,000 pounds). Based on the principles, Carrier C will be offered the first shipment since it is the lowest ranked carrier with the highest CERS score and was ranked first based on the ranking principle. Carrier B is awarded the second shipment (8,000 pounds) because at this point in the cycle it has the highest CERS score and lowest cumulative weight (0 pounds). Carrier A is awarded the next two shipments (4,000 and

13,500). Carrier A is awarded the third shipment since it has the highest CERS score and lowest cumulative tonnage (0 pounds). Carrier A also receives the fourth shipment even after the third shipment because Carrier A still has the highest CERS score and lowest cumulative tonnage (4,000 pounds) compared to Carrier C (6,000 cumulative pounds) and Carrier B (8,000 cumulative pounds). In addition, Carrier B could not receive the 13,500 pound shipment because it would violate the 20,000 pound weight differential principle ( $13,500 + 8,000$ ).

Proceeding through the example, the fifth shipment (3,000 pounds) is awarded to Carrier E. The service member requested Carrier E. In this example, the member's request is honored by the ITO causing a temporary imbalance in the TDR. This is a judgement call by the ITO, but it appears to be based on the sound traffic management principle (i.e., the ITO knows that other shipments will be available to correct the imbalance and award higher ranked carriers with more tonnage). The imbalance will be corrected with the eighth shipment. The sixth shipment (2,000 pounds) is awarded to Carrier D. Again, this is an ITO judgement call that appears to be driven by the sound traffic management principle. The seventh shipment (7,000 pounds) is awarded to Carrier C (the highest ranked carrier with the lowest cumulative weight). The eighth shipment is awarded to Carrier D to offset the

imbalance that occurred in awarding the fifth shipment to Carrier E.

Carrier F received the ninth shipment (1,000 pounds) possibly due to inability of other carriers to handle the shipment and/or the low shipment weight. The tenth shipment (6,000 pounds) is awarded to Carrier B (the best performer with the lowest cumulative weight). The process will continue until all shipments are awarded. The final TDR appears below:

<u>Carrier</u>	<u>Score</u>	<u>Est Wt/Cum Wt</u>	<u>Est Wt/Cum Wt</u>	<u>Est Wt/Cum Wt</u>
C	98	1)6,000/6,000	7)7,000/13,000	/13,000
B	98	2)8,000/8,000	10)6,000/14,000	/14,000
A	98	3)4,000/4,000	4)13,500/17,500	/17,500
D	92	6)2,000/2,000	8)4,000/6,000	11)5,000/11,000
E	88	5)3,000/3,000	13)8,000/11,000	/11,000
F	87	9)1,000/1,000	12)2,000/2,000	/3,000
G	85		14)3,000/3,000	/3,000

The example above was governed primarily by the principles of awarding traffic to the carrier with the highest performance score and lowest cumulative weight. The 20,000 pound weight differential was not exceeded in any case. In only one case, the fifth shipment, did a lower ranked carrier receive tonnage before a higher ranked carrier. This situation was later corrected with the eighth shipment. Although all carriers received some tonnage under

this scenario, the higher ranked group of carriers was awarded more tonnage for demonstrated past superior performance (as indicated by their CERS scores).

How much traffic can be awarded in a rate category before the ITO moves into a higher rate category? If the carriers in the low rate category have the capacity (manpower, vehicles, and storage space), they will receive all traffic. If the rate level becomes saturated (i.e., no carrier in that rate level can accept the shipment), the next highest rate group can be used.

Intrastate TDR procedures vary from the process above. For intrastate moves, a rate printout provided by MTMC will identify the primary carriers (rate setters) for each six month rate cycle for each rate channel.<sup>3</sup> The primary carrier (who is qualified under the CERS program) will receive 50 percent of all intrastate traffic. Remaining tonnage will be offered to those carriers who me-too the primary carrier's rate. The me-too carriers will be placed on the TDR behind the primary carrier based on CERS performance. All other carriers will be placed on separate TDRs according to their filed rates.

The key point to keep in mind in the entire traffic allocation decision, be it interstate or intrastate, is that traffic is allocated to the group of low rate carriers first.

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<sup>3</sup>A rate channel can be defined as the rate filed from origin to any destination.



Performance scores attained under the CERS program establish the minimum satisfactory requirements that all carriers must meet and are used to determine traffic precedence within each rate group. The next section describes additional quality assurance programs currently available to personal property managers.

#### **D. ADDITIONAL QUALITY ASSURANCE PROGRAMS**

The Military Traffic Management Command has instituted several additional quality assurance programs and initiatives to assist local ITOs in controlling carrier service. This section will briefly discuss three of these programs: the pre-award survey, shipment inspection by ITO representatives, and punitive actions.

##### **1. Pre-award Surveys**

To participate in DOD sponsored household goods traffic, carriers must submit to an initial inspection of their facilities by a Regional Storage Management Office (RSMO) representative. These offices perform the contract administration function for the DOD Personal Property Shipment Program. In addition, they are responsible for inspecting all carriers or carriers' agents facilities, equipment, and personnel within CONUS. [Ref. 2:pp. 2-35 to 2-37]

Regional Storage Management Office inspectors use the Pre-Award Survey--DD Form 1811 to inspect a carrier's or

agent's operation. See Figure 7. An ITO representative will accompany the RSMO representative on all inspections. During their inspections, they will check on the carrier's capacity (number and types of trucks and warehouses), fire and security protection capabilities, storage methods, flood protection measures, rodent and/or insect control, and indications of hazardous operations. The results of this survey and the submission of financial statements, letters of intent, Tender of Service signature sheets, and licensing evidence from the Interstate Commerce Commission and state regulatory bodies will determine carrier is approved to move DOD personal property shipments. [Ref. 2:pp. 2-46 to 2-47]

## **2. Inspections by Installation Transportation Office Personnel**

After the initial inspection by the RSMO, carrier facilities and equipment are reinspected every six months by local ITO inspectors. The results are recorded on the Warehouse Inspection Record--DD Form 1812. See Figure 8. However, if a carrier's facility is located more than 100 miles from the shipping office, annual inspections may be performed. These inspections must be accomplished in addition to the inspections of incoming and outgoing personal property shipments. Installation Transportation Offices must

DD FORM 1811

**Figure 7: Pre-award Survey of Contractor's/Carrier's Facilities and Equipment [Ref. 2:p. 2-21]**

WAREHOUSE INSPECTION REPORT				<input type="checkbox"/> BOTH BOA AND SIT <input type="checkbox"/> RSMD <input type="checkbox"/> ITO		DATE OF INSPECTION (Yr/Mo/Day)		
NAME AND ADDRESS OF CONTRACTOR/CARRIER	ADDRESS OF WAREHOUSE		FIRE SYSTEM/CLASS		LOTS	WEIGHT		
			SS/T	US/2			D & A/3	FCR/M
			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
CONTRACT REFERENCE NUMBER		STATUS: <input type="checkbox"/> ACTIVE <input type="checkbox"/> INACTIVE <input type="checkbox"/> INELIGIBLE		CURRENT CONTRACT OR TENDER OF SERVICE ON FILE <input type="checkbox"/> YES <input type="checkbox"/> NO				
<b>1. PRE AND POST STORAGE SERVICES</b> _____ A Unauthorized equipment in use _____ B Unauthorized carriers and packaging used _____ C Improper packing/weaving/marketing of cartons _____ D Pickup service not accomplished on time _____ E Improper loading/unloading of van or pallet _____ F Disassembled parts not packaged/inventoried _____ G Inventory stickers on finished surfaces _____ H Improper appliance servicing/labeling _____ I Smoking observed at residence _____ J Employees on duty not efficient/meet _____ K Origin premises not left in good order _____ L Destination services improperly performed _____ M Deviations to service order _____ N Delivery service not accomplished on time				<b>3. (CONT)</b> _____ L Improper plane/tarzan storage _____ M Improper storage of mattresses _____ N Segregated items not properly identified _____ O Improper packing of mattresses/plastic table tops _____ P Inadequate protection against mold/mildew _____ Q Alakes being used to process goods invent _____ R Previous discrepancies not corrected* <b>4. FIRE PREVENTION AND HOUSEKEEPING</b> _____ A Electric/hot/water systems require repair _____ B Evidence of smoking in warehouse* _____ C Unauthorized items stored* _____ D Improper aisle and/or stacking clearance _____ E No fire system inspection* _____ F No fire extinguisher inspection _____ G No extinguishers on warehouse equipment _____ H Trash/debris in storage area _____ I Fire doors inoperable/in need of repair _____ J No fire plan posted _____ K Space heaters/extension cords being used _____ L Gas and oil not drained from motorized items _____ M Hazards noted within 50 feet of warehouse* _____ N Flammables/combustibles found in warehouse*				
<b>2. ADMINISTRATION</b> _____ A Incorrect inventory preparation _____ B No separate weight ticket and certificate/PS and EWT _____ C Incorrect warehouse receipt preparation _____ D Ineffective locator system* _____ E Contact supporting paperwork needed				<b>5. WAREHOUSE PRACTICES</b> _____ A Inadequate security* _____ B Inadequate loading/unloading area _____ C Structural deficiencies (doors/floors/roofs/walls/windows) _____ D Inadequate protection from sunlight/hot/cold/moisture _____ E Lack of insect/rodent control _____ F Vehicles parked in storage area _____ G Commingled storage with undesirable commodities _____ H Multiple occupancy* _____ I Weight stored in excess of authorized limit*				
<b>3. STORAGE METHODS &amp; OPERATION</b> _____ A Comigned lots not stored within 5 days* _____ B Improper storage, stack/pallets _____ C Finished surfaces not protected by pads/wrap _____ D Lots and separated pieces not elevated 2 inches _____ E Lots stored against exterior walls _____ F Lawnmowers not stored at base level of lot _____ G Improper firearms control _____ H Loose stack storage over 10 feet* _____ I PBO contents not identified on inventory _____ J Improper storage of upholstered pieces* _____ K Improper storage of rugs/pads*								
<b>6. DEFICIENCIES OBSERVED/ACTIONS TAKEN BASED ON QUALITY CONTROL RATING RAW SCORE</b> <div style="text-align: right;">             A: 0    B: 1-4    C: 5-16    D: 17 &amp; OVER           </div>								
_____ A No deficiencies observed. _____ B Corrective action without report is required as soon as possible _____ C Corrective action, confirmed in writing, is required by _____ (DATE). Send notice of corrective action to _____ _____ D You are _____ for further business as of _____ _____ E You are continued ineligible for further initial service orders. <b>NOTE</b> -- See REVERSE SIDE for instructions.								
DOCUMENT FILES CHECKED			LOT NUMBERS CHECKED					
REMARKS:								
SIGNATURE & TITLE OF CONTRACTOR/CARRIER/REPRESENTATIVE				SIGNATURE OF DEPARTMENT OF DEFENSE INSPECTOR				

DD FORM 1812

SECTION 1 AND 21 IS OBSOLETE

1 - RSMD/ITO FILE COPY

Figure 8: Warehouse Inspection Report [Ref. 2:p. 2-51]

inspect quarterly not less than 50 percent of all personal property shipments. [Ref. 2:pp. 2-34 to 3-35]

### **3. Punitive Actions**

Should a positive approach through CERS or another quality assurance method fail to produce the desired service levels, MTMC and local ITOs have several punitive actions which they may invoke. They are [Ref. 2:pp. 2-60 to 2-66]:

#### **a. Letter of warning**

Letters of warning are issued for minor tender of service violations. The DD Form 2223 and local correspondence is used to notify carriers that they have been given a letter of warning. Carriers may appeal any letter of warning.

#### **b. Suspensions**

Should a letter of warning(s) fail to correct a situation, MTMC or the ITO can take steps to suspend the carrier. During the suspension period (30 to 135 days, depending on the number of suspensions involved), no traffic will be awarded to the carrier or agent, even if the agent represents several carriers. A suspension is only imposed after MTMC or the ITO issues a letter of warning (except in cases where carriers willfully or flagrantly violate DOD personal property regulations).

Regular suspensions can be imposed for repetitive (three or more) minor tender of service violations or violations of other DOD personal property rules and

regulations. Immediate suspensions can be imposed if any of the following willful or flagrant violations occur:

1. Carrier personnel are under the influence of alcohol or unlawful drugs at the member's residence.
2. Carrier personnel use abusive language, actions, or conduct in the presence of the member or member's family.
3. Carrier personnel commit fraud.
4. Carrier personnel deliberately damage a member's possessions.
5. Carrier personnel fail to meet the previously agreed upon pickup date.
6. Carrier personnel miss the RDD by 10 or more days except when missed RDD occurs due to acts of God, strikes, and natural disasters.
7. Carrier personnel do not provide protected storage (from the elements) during periods of temporary storage.

Carriers are notified of suspension actions by the Letter of Suspension--DD Form 1814. See Figure 9. Carriers are not reinstated until satisfactory evidence is provided to MTMC and the ITO of corrective action. If evidence is adequate, the carrier can be reinstated at the end of the suspension period. As was the case with the letter of warning, carriers can appeal any suspension action. If the appeal is granted, carriers will be immediately reinstated and offered sufficient shipments to return the carrier to the relative TDR position it held at the time the suspension was imposed.

<b>CARRIER</b> <input type="checkbox"/> <b>WARNING</b> <input type="checkbox"/> <b>SUSPENSION</b> <input type="checkbox"/> <b>REINSTATEMENT</b> <input type="checkbox"/> <b>CANCELLATION OF WARNING</b>					<b>DATE</b>	
<b>FROM:</b> (Shipping Activity & Symbol)						
<b>INSTRUCTIONS:</b> This form will be completed in accordance with instructions on the reverse.						
<b>TO:</b> (Carrier's Name, Address)						<b>CARRIER CODE</b>
<b>PART I - PERSONAL PROPERTY OWNER DATA</b>						
<b>NAME</b> (Last, First, MI)					<b>GRADE</b>	<b>SSN</b>
<b>PART II - SHIPMENT DATA</b>						
<b>SHIPMENT MOVED FROM</b> (City or Installation, State/Country)						
<b>SHIPMENT DESTINED FOR</b> (City or Installation, State/Country)						
<b>PART III - CARRIER ACTION</b>						
<input type="checkbox"/> Due to the violation(s) of the Tender of Service cited below, you are hereby warned that a repetition of this type of service will be the basis for suspension.						
<input type="checkbox"/> Due to the violation(s) of the Tender of Service cited below, your company is suspended at this installation for the period indicated.						
<input type="checkbox"/> Your company will be reinstated to the list of carriers eligible to serve this installation on the date shown below.						
<b>TYPE OF ACTION</b>					<b>INSTALLATION CODE</b>	
W - Warning    1 - 30-Day Suspension    2 - 45-Day Suspension 3 - 60-Day Suspension    R - Reinstatement    C - Cancellation of Warning						
<b>GBL</b>	<b>TYPE OF ACTION</b>	<b>EFFECTIVE DATE</b>	<b>T/S PARA</b>	<b>T/S PARA</b>	<b>T/S PARA</b>	<b>T/S PARA</b>
<b>EXPLANATION OF T/S PARAGRAPHS LISTED ABOVE:</b> (See INSTRUCTIONS on the reverse side.)						
<b>NAME OF INSTALLATION TRANSPORTATION OFFICER</b> (Type)					<b>SIGNATURE</b>	

DD FORM 1814

EDITION OF 1 JUN 71 WILL BE USED UNTIL EXHAUSTED.

Figure 9: Carrier Warning/Suspension/Reinstatement/Cancellation of Warning--DD Form 1814 (Ref. 2:p. 2-70)

### c. Disqualifications

Disqualifications are the most severe form of carrier punishment. Disqualifications can only be imposed by the Commander, Military Traffic Management Command. Installation Transportation Officers can initiate a recommendation for carrier disqualification when a carrier:

1. Incurs three suspensions during the same six month performance cycle.
2. Fails to achieve an average CERS score of 85 for two consecutive performance periods.
3. Clearly indicates its inability or unwillingness to meet its contractual agreement as evidenced by repetitive tender of service violations.

Carriers are notified by certified mail of the ITO's intent to recommend disqualification and given 30 days to respond. If a carrier fails to respond or the response is not acceptable, the ITO will forward the recommendation for disqualification to the appropriate MTMC field office for further action. Disqualifications may be imposed for definite or indefinite periods and may be areawide, nationwide, or worldwide. Disqualifications may also be imposed for specific routes, installations, or rate areas depending on the severity of the problem. Disqualifications are not common. In the last four years, only three domestic interstate carriers have been disqualified from doing further personal property business by MTMC [Ref. 14].



## E. CONCLUSION

This chapter described the current CERS program, how traffic is allocated using CERS, and other quality assurance programs in effect to control service provided by carriers. The CERS program and other quality assurance initiatives are but one facet of a combined effort by MTMC, the services, and ITOs to monitor the military moving process. The next chapter presents and analyzes data depicting CERS performance since the program was revised in 1984.

#### **IV. CERS PERFORMANCE STATISTICS**

##### **A. INTRODUCTION**

This chapter analyzes several tables and charts depicting CERS performance from May 1984 to April 1988. The material in this chapter was derived from CERS II performance data and actual loss and damage claims information provided by Headquarters, Military Traffic Management Command.

##### **B. CARRIER EVALUATION AND REPORTING SYSTEM STATISTICS: MAY 1984 TO APRIL 1988**

Table 1 lists CERS performance statistics for eight six-month performance periods beginning with the May to October 1984 performance period. This performance period was the first full reporting period under the revised CERS format. Figures 10 and 11 are graphical representations of the data contained in Table 1. The reader should carefully review each table and chart as they will be referred to again throughout the remainder of this analysis.

As stated in Chapter III, MTMC established performance goals for the three scored performance elements. The goals were: 95% of all shipments will be picked up on time, 90% of all shipments will be delivered on time, and 70% of all shipments will not experience any loss or damage. The

following observations can be made regarding these three performance elements:

TABLE 1: CERS PERFORMANCE--MAY 1984-APRIL 1988

<u>Reporting Period</u>	<u>Shipments Scored</u>	<u>Missed Pickup</u>	<u>Missed RDD</u>	<u>Loss/Damage Claims</u>
MAY 84-OCT 84	108,400	810	13,000	28,200
NOV 84-APR 85	102,800	520	14,400	26,700
MAY 85-OCT 85	99,000	580	11,900	26,300
NOV 85-APR 86	116,300	470	14,000	29,100
MAY 86-OCT 86	109,000	490	10,900	25,100
NOV 86-APR 87	116,100	420	12,800	26,700
MAY 87-OCT 87	108,800	400	10,900	23,900
NOV 87-APR 88	<u>101,000</u>	<u>400</u>	<u>12,100</u>	<u>24,200</u>
TOTAL	861,400	4,090	100,000	210,200
PERCENT OF TOTAL		.48%	11.61%	24.40%

Notes: Shipments scored, missed RDD, and loss/damage figures rounded to nearest hundred. Missed pickup figure rounded to nearest ten.

# CERS PERFORMANCE

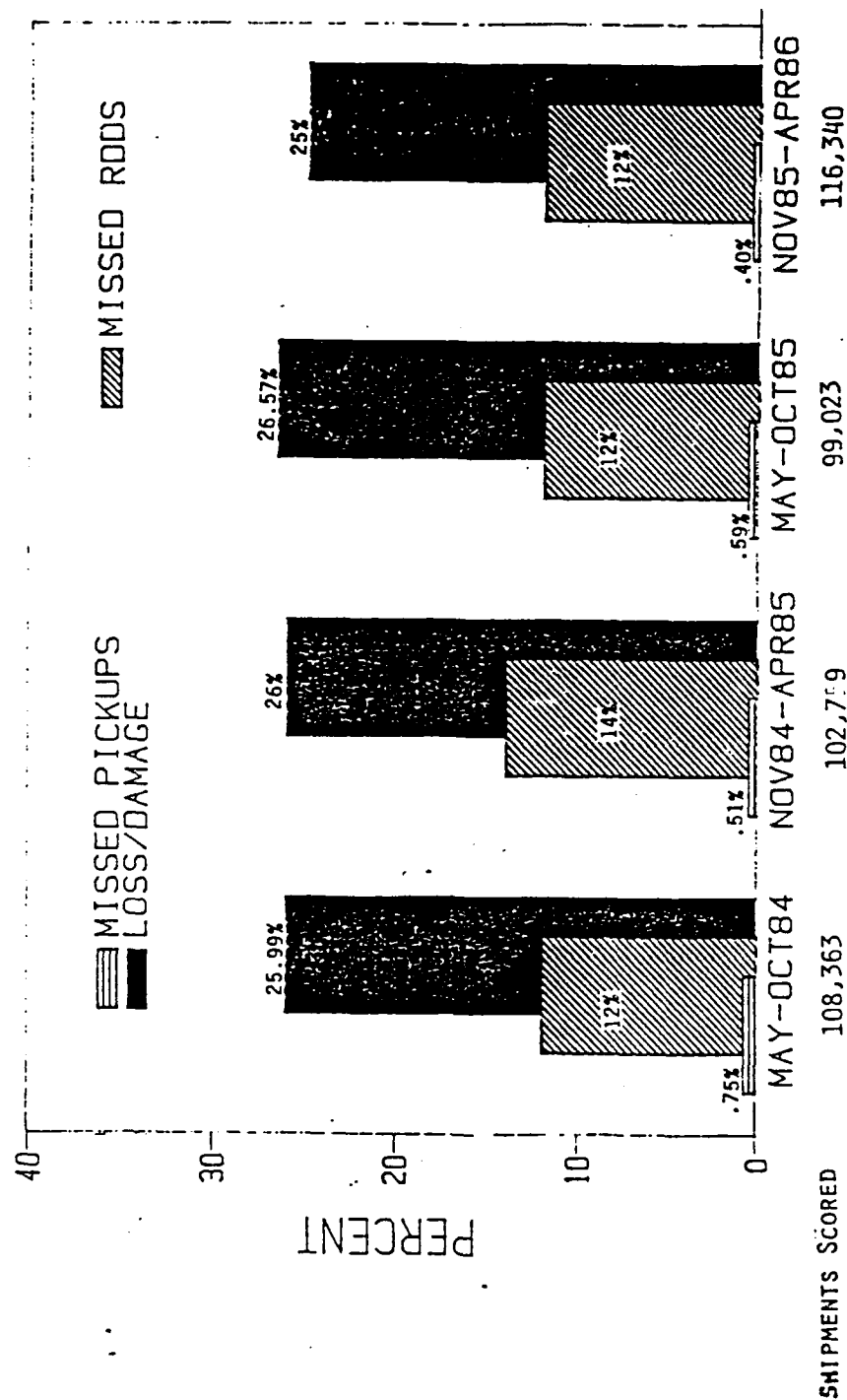


Figure 10: CERS Performance May 1984 to April 1986  
(Source: HQ, MTMC)

# CERS PERFORMANCE

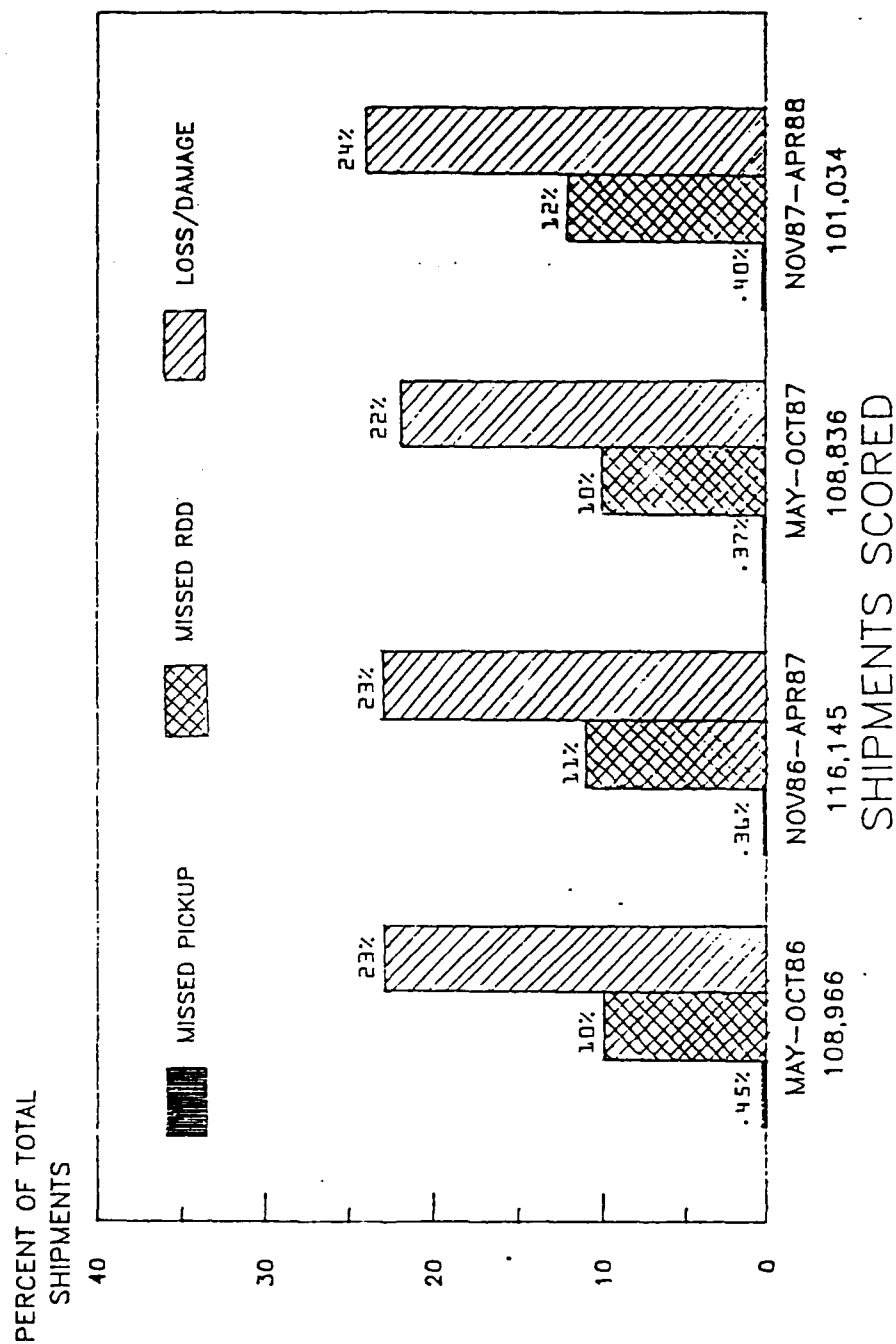


Figure 11: CERS Performance May 1986 to April 1988  
(Source: HQ, MTMC)

## 1. On-time Pickup

The most impressive performance element is on time pickup. From May 1984 to April 1988, over 861,400 domestic shipments were scored under CERS. Only 4,090 shipments, or .48 of one percent of these shipments were scored as having missed the pickup date.

This performance element is impressive for a number of reasons. First, CERS performance in this area has often exceeded total moving industry performance. An American Moving Council (AMC) report of 1985 moving industry performance indicators found that major van lines could only achieve a 1.47% missed pickup rate [Ref. 15:p. 50]. Second, on-time pickup performance has far exceeded MTMC established goals (95% of all shipments will be picked up on time) for each performance period. Even during the worst performance period, May to October 1984, 99.25% of all shipments were picked up on time. Third, on-time pickup performance appears to be steadily improving. 810 shipments were picked up late in the May to October 1984 performance period. Three years later, this figure has been cut by more than half to 400 (May 87 to October 87 and November 87 to April 1988).

## 2. On-time Delivery

The most disappointing performance element is on-time delivery. This performance element is disappointing for a number of reasons. First, performance in this area is below moving industry averages. The American Moving Council noted

that the moving industry's 1985 on-time delivery rate for domestic shipments was 96.6% [Ref. 15:p. 50]. The best performance in any performance period for military shipments was 90% (88% average over the eight periods). Second, in only one reporting period, May to October 1987, was the 90% performance goal for this performance element reached, and then just barely (90%). Third, there does not appear to be an improvement trend in on-time delivery. The November 1987 to April 1988 performance statistics show that more than 12% of domestic shipments are still not being delivered on time. This percentage is virtually the same as the May to October 1984 initial reporting period. Finally, what the statistics fail to measure is service members' inconvenience in terms of additional temporary housing and food costs and disruption from not having their household belongings when they need them.

The Military Traffic Management Command may want to consider strengthening the penalties for missing RDD. Currently, a carrier receives a letter of warning for missing the RDD by one to nine days, and an automatic suspension if the RDD is missed by ten or more days [Ref. 2:p. 2-61]. Perhaps an automatic suspension should be levied when the RDD is missed by five or more days. This would increase carrier incentive to improve performance in this area.

### 3. Loss and Damage

Another disappointing performance element was loss and damage. Although carriers met the MTMC established goal of 70% in every performance period, loss and damage rates of 22 to 27% are still too high. In simple terms, this means that one out of every four domestic military household goods shipments in the last four years has experienced some type of loss and/or damage.

Loss and damage usually leads to some type of claim being filed by the member. Table 2 below lists claims data for Fiscal Years 1984 through 1987.

TABLE 2: ACTUAL LOSS AND DAMAGE CLAIMS 1984-1988 [Ref. 16]  
(Codes 1 and 2 Shipments)

---

<u>Fiscal Year</u>	<u>No. of Shipments</u>	<u>No. of Claims</u>	<u>Claims Amount</u>	<u>Ave. Claim</u>
1984	210,832	37,059	\$22,124,000	\$597
1985	227,085	30,749	\$19,471,000	\$633
1986	222,068	30,057	\$18,411,000	\$613
1987	<u>219,560</u>	<u>24,189</u>	<u>\$13,629,000</u>	<u>\$563</u>
Totals	879,545	122,054	\$73,635,000	\$603

---

Note: Fiscal Year 1987 data is incomplete as service members are allowed up to two years to file a claim. Damage claims dollar amounts are rounded to the nearest thousand.

Figures are not adjusted for inflation.

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At first glance, it appears that there has been some improvement in the number and dollar amounts of damage claims being filed. The reader should note that the 1987 figures are incomplete as service members are allowed two years to file a claim for loss and/or damage to their household goods. The average claim column may be a better indicator of loss and damage performance. Disregarding the 1987 figures, average claim amounts average over \$600.00 with no significant improvement trend in the three year period from 1984 to 1986. In addition, 73 million dollars in loss and damage over a four year period is not indicative of acceptable performance in this researcher's opinion. The Military Traffic Management Command is taking steps to put more emphasis into reducing loss and damage through the New Released Valuation on Through Government Bill of Lading (TGBL) Personnel Property Program. This new program will be discussed in greater detail in the following chapter.

### C. CONCLUSION

This chapter presented and analyzed the results of the revised CERS program. It appears that little has changed since the program was initiated. On-time pickup performance continues to be impressive, while the other two performance elements show little, if any, improvement.

Chapter V presents findings concerning the current status of the CERS program and related carrier control initiatives.

Specifically, Chapter V will address the major deficiencies of the current CERS program, recommendations by various groups of what can be done to improve the DOD domestic carrier evaluation process, and possible alternatives to the present evaluation system.

## **V. PRESENTATION AND ANALYSIS OF FINDINGS**

### **A. INTRODUCTION**

In the preceding chapters, the development and operating characteristics of past and current Department of Defense domestic carrier evaluation and control systems were discussed. Chapter V presents findings about the current status of CERS and related carrier control initiatives. To accomplish this, Chapter V is organized as follows:

1. The Interview Process
2. Current CERS Deficiencies
3. Improving CERS: DOD and Moving Industry Recommendations
4. Alternative Quality Assurance Systems
5. Recent Quality Assurance Initiatives

### **B. THE INTERVIEW PROCESS**

As stated in Chapter I, three semi-structured interviews were used with the various groups to elicit a wide range of responses on what is wrong (or perceived to be wrong) with CERS and what can be done to improve CERS and the domestic quality assurance process. The interviews were conducted over a seven-month period. Appendix C contains a complete listing (except for local carriers) of all individuals and groups interviewed or providing data/information for this thesis. These interviews were designed to answer this study's five subsidiary research questions:

1. What are the major criticisms of the CERS program?
2. What are the recommendations of DOD personal property managers for improving CERS?
3. What are the recommendations of the moving industry for improving CERS?
4. What programs do private firms and other public agencies use to evaluate contracted moving service?
5. What new domestic quality assurance initiatives are being proposed to improve CERS and service provided by the moving industry?

The first semi-structured interview was conducted by telephone with 26 DOD installation-level personal property officials. This group included housing directors, quality assurance/quality control personnel, and CERS administrators. The installation level officials were asked the following questions:

1. What do you feel are the major deficiencies of the current CERS program?
2. What recommendations do you have for improving CERS?

The author received additional information from informal interviews and data/reports from the Military Traffic Management Command, Military Traffic Management Command Western Area, the services' transportation schools, and the General Accounting Office.

The second group of interviews was conducted with selected members of the moving industry. Trade association and national moving company personnel were interviewed by telephone. Local moving firms were interviewed in person.

The questions used for this interview were the same as those used for local DOD installation officials.

The third group of interviews was conducted by telephone with representatives from eight large private companies and two large public agencies. The primary purpose of this interview was to determine what types of alternative carrier evaluation and control systems exist, and if elements of these systems could be incorporated into the CERS program.

The questions for this interview were:

1. What factors/measures does your company use to evaluate moving service?
2. Of the factors/measures previously mentioned, which do you feel is most important and why?
3. How often does your company (agency) rate service provided by moving companies?
4. Are the results of moving evaluations given to carriers? How?
5. Is your evaluation process used as:
  - a. a basis for selection of moving companies to use?
  - b. a means for disciplining carriers?
6. What are the main criteria that your company (agency) uses to evaluate a moving firm before entering into a contract?
7. Of the factors listed above, which is most important and why?
8. What incentives or rewards do you give a moving company for providing excellent moving service?
9. What type of feedback system does your company use to capture client satisfaction and dissatisfaction?

Additional information was provided by the Employee Relocation Council. The Employee Relocation Council is a professional organization that provides its members with information concerning relocation trends. The next three sections present interview results.

### C. CURRENT CERS DEFICIENCIES

After initial contact was established, DOD and moving industry officials were asked to describe what they felt were the major deficiencies with the current CERS program. Table 3 summarizes responses for DOD officials. Table 4 summarizes responses for moving industry officials. This section will review and discuss these two tables.

#### 1. Department of Defense Criticisms

The primary criticism or deficiency of the current CERS program (based on number of responses) was that the program no longer has a formal method of gathering customer feedback. Prior to 1 October 1988, DOD Personal Property Activities used the Customer Satisfaction Report--DD Form 1781 (see Figure 12) to determine customer satisfaction and/or dissatisfaction with a move and to gather loss and damage estimates (see Block 9 of the form). The DD Form 1781 was completed by the member and returned to the destination ITO. The destination ITO would examine the form to determine if there were any problems at destination, take management action to correct problems, annotate the DD Form 2223 as

TABLE 3: CERS DEFICIENCIES--RESPONSES TO INTERVIEW QUESTION  
#1 BY DOD QUALITY ASSURANCE AND CERS PERSONNEL

<u>Deficiency</u>	<u>Number of Responses</u>
No formal method exists for gathering customer feedback	8
Lack of emphasis on tender of service violations	6
Input is not timely	5
Excessive paperwork	4
Incorrect input	3
Relying on damage estimates vice actual claim amounts	2
Emphasis in the domestic program of awarding traffic by cost then service	1
Missed pickup scoring is too severe	1
CERS does not work well during the peak season	1
Too many carriers in the domestic program	1

TABLE 4: CERS DEFICIENCIES--RESPONSES TO INTERVIEW  
QUESTION #1 BY MOVING INDUSTRY REPRESENTATIVES

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<u>Deficiency</u>	<u>Number of Responses</u>
CERS provides no real incentive to carriers to improve service since rates (not service) are the primary determinant used by MTMC to award traffic	6
Scoring of shipments going into or out of storage-in-transit	4
Carrier performance scores can be determined by as little as one shipment	2
CERS administrators are poorly trained	1
Loss and damage information is based on member's estimates	1

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CUSTOMER SATISFACTION REPORT				REPORT CONTROL SYMBOL NTMIC-118 (R1)	
A. DESTINATION TRANSPORTATION OFFICE USE ONLY					
1. MEMBER NAME (Last, First, Middle Initial)		2. GBL NUMBER OR CONTROL NUMBER		3. CODE OF SERVICE	
4. ORIGIN OF SHIPMENT (Name of Installation)		5. GBL LOC	6. NAME OF CARRIER		7. SCAC
B. CUSTOMER USE ONLY					
INSTRUCTIONS: Carefully read PRIVACY ACT STATEMENT and INSTRUCTIONS on inside. Answer questions below, detach this form and PLEASE RETURN WITHIN 5 DAYS.					
		(X one) YES NO N/A		12. Use this section for your COMMENTS. A "NO" answer to questions marked with a "*" MUST BE EXPLAINED or your response can not be used to evaluate the mover.	
1. Did mover give you an accurate and legible inventory?					
2. Did mover reassemble items he/she disassembled? *					
3. Did mover secure movable parts of washer at origin and remove blocking material at destination? *					
4. Was a premove survey performed? *					
5. Did mover unpack those cartons you asked to be unpacked? *					
6. Did mover record loss or damage on inventory or DD Form 1840 and provide copies? *					
7. In your opinion, were the mover's personnel cooperative and courteous? *					
8. Did mover remove packing/unpacking debris? *					
9. Did mover prevent loss or damage during move? If answer is "NO," please explain in item 12.					
10. Were you satisfied with your move? If not, explain *					
11. Give estimated loss/damage sustained in move.					
13. SIGNATURE OF CUSTOMER		14. DATE SIGNED		FOR T.O. USE ONLY	
DD Form 1781					
Previous editions are obsolete					

Figure 12: DD 1781--Customer Satisfaction Report  
[Ref. 2:p. A18]

appropriate, and then forward the forms to the origin shipping office for final CERS scoring and evaluation. The Customer Satisfaction Report contained information relating to their service aspects (tender of service elements) of the move, i.e., inventory preparation, packing and unpacking, courtesy and cooperation of moving personnel, prevention of loss and damage, and removal of packing/unpacking debris. In addition, the form contained a section for members to express their opinions to the ITO concerning overall move quality.

The Customer Satisfaction Report did have some significant weaknesses that eventually led to its demise. First, return rates at some installations were very poor. At one major installation, service members returned only 10-15% of the forms [Ref. 12]. Figueroa reported in his study that overall return rates ranged from 20-50% [Ref. 6:p. 78]. DD Form 1781 return was never mandatory, and thus only a small percentage of service members returned the evaluation. As a result, many installation transportation officers operated in a partial information vacuum [Ref. 6:p. 47]. Situations developed where an ITO perceived that marginal service was provided by a carrier, but he or she could not take any positive action to correct the situation without hard evidence from the member [Ref. 6:47]. The form's second major weakness was the ambiguity of certain answers provided by members. A typical problem encountered by many ITOs would be forms returned with numerous tender violations and

extensive damage noted, yet block 10 would be completed stating the move was satisfactory and block 11 had no explanation for violations [Ref. 17].

Due in part to the weaknesses described above, MTMC decided in May 1988 to discontinue use of the DD Form 1781 and replace it with a revised version of DD Form 1840 [Ref. 18:p. 1]. The major advantage of the DD Form 1840 is that the carrier must return the form to the destination ITO.<sup>4</sup> Loss and damage estimates, a key part of the current CERS program, should be available for each move. An additional advantage is in the area of paperwork reduction. With some 800,000 moves to score each year (the 1781 was used in the international program as well), the elimination of one piece of paper may result in considerable time and cost savings.

However, there are three significant disadvantages with the new system. First, because of the demise of the DD Form 1781, there is now no direct feedback system for use by personal property managers to determine if a service member is receiving proper moving service. Many managers interviewed felt that the service member should be provided with some vehicle to express their satisfaction or dissatisfaction with a mover. Second, many tender elements

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<sup>4</sup>Carriers failing to return the DD Form 1840 will be issued letters of warning. If a trend (defined by MTMC as three or more) of not returning the DD Form 1840 is noted, a regular suspension is warranted. [Ref. 18:p. 2]

such as inventory preparation, courtesy and cooperation, prevention of loss and damage are no longer evaluated by the member. Despite poor return rates, evaluation of these tender elements provided ITOs with additional performance data that was used in conjunction with inspector's evaluations to determine marginal carriers. The third major disadvantage or potential disadvantage noted by many officials was their criticism of the DD form 1840. The form is filled out jointly by the member and the driver in the driver's presence when delivery is completed. Many DOD officials, including the author, felt that many service members and/or their spouses would be reluctant to put down any negative remarks when the driver was still in the service member's residence.

The second major criticism was the lack of emphasis on tender violations. Under current CERS procedures, tender violations are not scored elements. Department of Defense officials listing this element felt that more emphasis is needed to prevent tender violations from recurring. Two officials stated that tender violations should be a scored element, recommending a 25% split in scoring for pickup, delivery, loss and damage, and tender violations. The main problem in this area may be poor interpretation of the PPTMR by DOD officials. The Personal Property Traffic Management Regulation is fairly explicit concerning the number (three)

and types of violations that need to occur before suspension action can be initiated [Ref. 2:p. 2-66]

The third major criticism was that input was not timely or did not arrive at all. Lack of timely input can seriously inflate CERS' scores. The Personal Property Traffic Management Regulation recommends that destination ITOs complete and return the DD Form 2223 within 30 days after delivery has been made [Ref. 2:p. 2-40]. According to one CERS administrator, he seldom received CERS reports in a timely (within 30 days after delivery) fashion [Ref. 19]. After repeated tracer action had failed, he was "forced" to award an administrative score of 100 to the carrier [Ref. 19]. The Personal Property Traffic Management Regulation states that "carriers will be awarded full credit for those [performance] elements on which no contrary data has been received." [Ref. 2:p. 2-41] Lack of timely input can also cause a significant administrative burden on the origin ITO in the form of repeated tracer action to destination.

Excessive paperwork was cited at the fourth major criticism. The CERS process requires the completion and distribution of the DD Form 1840, DD Form 2223, and DD Form 2224 for all domestic moves. This process is currently accomplished at most ITOs on a manual basis. Some of the quality assurance officials interviewed indicated that they spend a majority of their time filling out forms instead of actually inspecting carriers and shipments.

Lack of correct input was cited as the fifth major criticism. Officials who cited this as a significant problem stated they often receive paperwork that either does not match the shipment or was incorrectly prepared. For example, several installations reported receiving CERS forms noting a loss and damage estimate without the required corresponding justification (DD Form 1781 or DD Form 1840) [Ref. 2:p. 2-42]. Without justification, a carrier must be given full credit for that performance element.

Part of the problem in CERS paperwork procedures may be attributable to the training or lack of training for CERS and quality assurance personnel. All of the services' transportation schools do offer some formal training on the CERS program and personal property quality assurance procedures [Ref. 20]; however, numerous installations interviewed indicated that most of their people were trained OJT (on-the-job) and that sufficient funds were not available to send their personnel to the service schools. Thus, what one CERS administrator knows can vary considerably from one installation to another. The service schools are attempting to overcome the training problem by offering personal property courses at local commands. The Naval Transportation Management School in Oakland, California offers the entire Personal Property Traffic Management course at various training sites throughout the year [Ref. 20]. With standardized training offered to all personal property

quality assurance personnel, form completion and submission errors should decline.

Additional CERS criticisms as stated by DOD officials are briefly discussed as follows:

Loss and damage evaluation is weak since this area relies on estimates by the service member vice actual claim amounts. Estimates can either be exceedingly high or low depending on the case involved. Exceedingly high estimates can unfairly penalize a carrier. Carriers can appeal many of these damage estimates, and these appeals cause an additional administrative burden for ITO personnel. Exceedingly low estimates can also cause serious problems. In the CERS forms examined at Fort Ord (CA) and the Naval Postgraduate School (CA), many forms did not contain an estimate of damage even though numerous items were noted to be damaged on the DD Form 1840. Under present guidelines, if an estimate has not been made by the member, the personnel who score CERS will automatically indicate a dollar amount of less than \$500 on the DD Form 2223 [Ref. 18:p. 1]. When loss and damage claims are actually settled, the claim may run into the thousands, but the original CERS score for this performance element cannot be changed.

The emphasis on low cost over quality eliminates incentives for carriers to achieve truly superior service. This was also cited as the major criticism by representatives of the moving and storage industry. There is nothing to

prevent a carrier with lower CERS scores from cutting its rates in order to receive traffic in a subsequent quarter. It is true this carrier may not receive all of the traffic if the other carriers "me-too", but the carrier will still receive a good portion of the tonnage to be awarded before the more service conscious carriers (as defined by higher CERS scores) at higher rate levels.

Missed pick-up scoring criteria is too severe. One respondent thought that carriers should be allowed some relaxation of the immediate suspension requirement for missing the pickup date. However, this researcher found that the no tolerance scoring criterion used for scoring on-time pickup is probably one of the most significant strengths of the CERS program. As stated in Chapter IV, missed pickup has occurred in only .4% of all domestic shipments since 1984. This exceeds performance by the moving industry in general. Additionally, this researcher could find no evidence that the missed pickup criterion was adversely affecting any carrier.

CERS does not work well during the peak season. As noted in Chapter II, peak season demand may force an ITO to use any carrier available during this time, regardless of past performance. Peak season problems continue to plague the military and the federal government in general. In 1985, one study indicated that 47.48% of all military/government moves occurred in the June 1-September 30 time frame [Ref. 15:p. 44]. Quality assurance procedures may be neglected if



demand for service is beyond the capability and capacity of the better movers during the peak season.

There are too many carriers in the domestic program to monitor. Deregulation of the household goods industry occurred in 1980 with the passage of the Motor Carrier Act of 1980 (P.L. 96-296) and the Household Goods Transportation Act of 1980 (S. 1798) [Ref. 21:p. 1]. Prior to these two acts, entry into the household good market, entry of existing carriers into other markets, and pricing was strictly regulated by the Interstate Commerce Commission (ICC) [Ref. 22:p. 8]. Due to deregulation, entry into the DOD transportation market is now fairly simple. If a carrier meets the basic ICC and DOD requirements, the carrier can easily enter into contracts to do business with the Department of Defense. The bottom line is that the number of carriers which DOD uses to move household goods has increased dramatically since 1980. The Department of Defense granted approval to 1254 domestic carriers to move military member's household goods shipments for Fiscal Year 1989 [Ref. 23:p. 14]. Considering that each of these carriers has to be monitored over thousands of traffic channels, the sheer number of carriers to monitor does appear to pose some unique quality assurance problems.

It should also be noted that five respondents did not think there was any problem with the CERS program. This is also a significant result. They acknowledged that there

were some weaknesses in the overall quality assurance program; however, CERS, at least at their installations, adequately separated the good carriers from the bad carriers.

This section described the major criticisms and deficiencies of the current CERS program as noted by DOD personnel who administer the program on a daily basis. The results indicate that there are some fundamental problems with the CERS program. Key among these problems are lack of customer input and the lack of emphasis on tender of service violations. In addition, there appears to be some basic problems with administering the program itself. Despite improvements made when the CERS program was revised in 1984, many interviewees felt that the costs (both personnel and time) in running the program still exceeded the benefits (better moving service).

## 2. Moving Industry Criticisms

Table 4 above summarizes interview responses for moving industry officials. The moving industry's primary criticism (based on number of responses) was that CERS provided no real incentive for carriers to improve performance since a carrier's rate is the primary determinant used by MTMC to award traffic. To understand this criticism, it is important to understand how DOD obtains moving rates.

The General Accounting Office (GAO) published a report on DOD's rate acquisition program in March 1986. The report, "Household Goods--DOD's Program for Obtaining Moving

Rates" described the new rate acquisition program that DOD implemented May 1, 1984 and which is in use today. The General Accounting Office reported that prior to May 1984 [Ref. 22:pp. 8-9]:

. . . the rates that a carrier charged DOD for moving household goods were submitted in two ways. First, most carriers belong to an organization known as a tariff or rate bureau. The major ones are the Household Goods Carriers' Bureau (1,700 members) and the Movers' and Warehousemen's Association (400 members). The bureaus were permitted to file rates for their member carriers under section 10706 of the Interstate Commerce Act. The carriers relied on these bureaus to submit the rates they would apply when billing DOD. The rates submitted by the bureaus were in the form of publications, or rate schedules, known as rate tenders, which contained uniform provisions, line haul rates, accessorial charges, rules, and regulations for shipping household goods. The tenders were approved by the Interstate Commerce Commission (ICC).

Second, in accordance with section 10701 of the Interstate Commerce Act, during each 6-month rate cycle, each carrier had the option to file a reduced or discount rate with MTMC. These discounts were not solicited by MTMC but were submitted as percentage of the rates in the tenders. Once a discount rate had been filed and accepted, all other carriers were notified and given the opportunity to match the discount rates.

In 1984, MTMC, believing that due to deregulation it must protect itself and the government from unreasonably high rates and/or undesirable terms and conditions, overhauled the rate acquisition program [Ref. 22:p. 1]. The Military Traffic Management Command stated that line haul rate levels submitted by the rate bureaus since deregulation had increased 84.7% between January 1979 and June 1983 [Ref. 22:p. 11]. In response, MTMC implemented a new rate

acquisition program.<sup>5</sup> This new rate acquisition program [Ref. 22:p. 2]:

. . . began the process under which carriers had to file their rates directly with MTMC using MTMC-established baseline rates as the basis for their rate submissions. For example, a carrier could specify that it would charge 75 percent of MTMC's baseline. There is no maximum or minimum limit on the percentage a carrier can file.

In other words, traffic will be awarded to those carriers providing quality service at the lowest overall cost to the government [Ref. 2:p. 1-2].

The moving industry had three major concerns with the new rate acquisition program. Their primary concern was that the changes "would cause carrier revenues to decrease and possibly even force some carriers out of business." [Ref. 22:p. 1] The General Accounting Office found that carrier revenues actually increased in the period studied (1983-1984) and found no instances where a carrier had gone out of business due to the program [Ref. 22:p. 1].

The moving industry's second concern was that the new program would result in higher costs to the government due to increased paperwork. The Military Traffic Management Command agreed with this concern, but stated that in the long run overall costs to the government would be reduced with the new program. [Ref. 22:p. 6]

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<sup>5</sup>The rate acquisition procedures described in this section are for interstate moves. Intrastate rate acquisition was described briefly in the TDR procedure section in Chapter III.

The moving industry's final concern was that the new program, spawning intense competition, would force some carriers to reduce costs thus reducing service quality. The General Accounting Office concluded in 1986 that it had insufficient evidence to determine if the new rate acquisition program adversely affected service quality. [Ref. 22:p. 1]

The new rate acquisition program appears to have generated the desired results in terms of reducing or holding rates constant. Carriers routinely submit rates that discount the DOD baseline rate by 20 to 50 percent [Ref. 24]. According to moving industry and some DOD personal property officials, the new program is also producing a major undesirable result: low rates often lead to poor service. To determine if this claim is true, the author performed a simple regression analysis to see if a carrier's rate as represented by revenue per hundredweight affects carrier service as represented by claims frequency (a measure of service) for fiscal year 1986.<sup>6</sup> Fiscal year 1986 was

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<sup>6</sup>Carrier revenue per cwt =  $\frac{\text{actual carrier revenue}}{\text{carrier tonnage (lbs.)}/100}$

Carrier claims frequency =  $\frac{\text{actual number of claims}}{\text{total number of shipments}}$

selected since this was the most recent year for which complete loss and damage claim information was available.<sup>7</sup>

The steps involved in setting up the regression analysis were as follows. First, 20 large carriers and freight forwarders were selected on a random basis using the 1986 Domestic and Mobile Home Personal Property Carrier Approvals listing published by MTMC and the random number table in the PPTMR. Each carrier/freight forwarder was assigned a three digit number. The author then used the random number table to select 20 numbers for use. These numbers were then converted back to the carrier/forwarder SCAC code (a 4 letter code that identifies a carrier/freight forwarder). Data on carrier revenue and claims data was provided to the author through two computer printouts supplied by Headquarters, MTMC. The first printout, PPDMS/STATA/C-W-DA, listed carrier revenue and weight information by destination for FY 1986. The second printout, PPDMS/CLAIMS/G-PAID, listed actual claims data (numbers and dollar amounts) by carrier for FY 1986.

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<sup>7</sup>A better method would be to compare actual rates filed by carrier per traffic channel from one rate cycle to the next with performance data provided by the CERS II system and actual claims data from the WHIST data base. Unfortunately, actual rate data for preceding rate cycles could not be made available to the author prior to completion of this thesis. Revenue per hundredweight is an adequate surrogate for rate data since carrier revenue is primarily a function of the rate filed.

The next step was to go through each printout and determine the number of shipments, carrier revenue, carrier weight, and number of claims for all 20 carriers. The results of this process are presented in Table 5.

TABLE 5: FISCAL YEAR 1986 DOD TGBL DATA-PERSONAL PROPERTY  
CODE 1

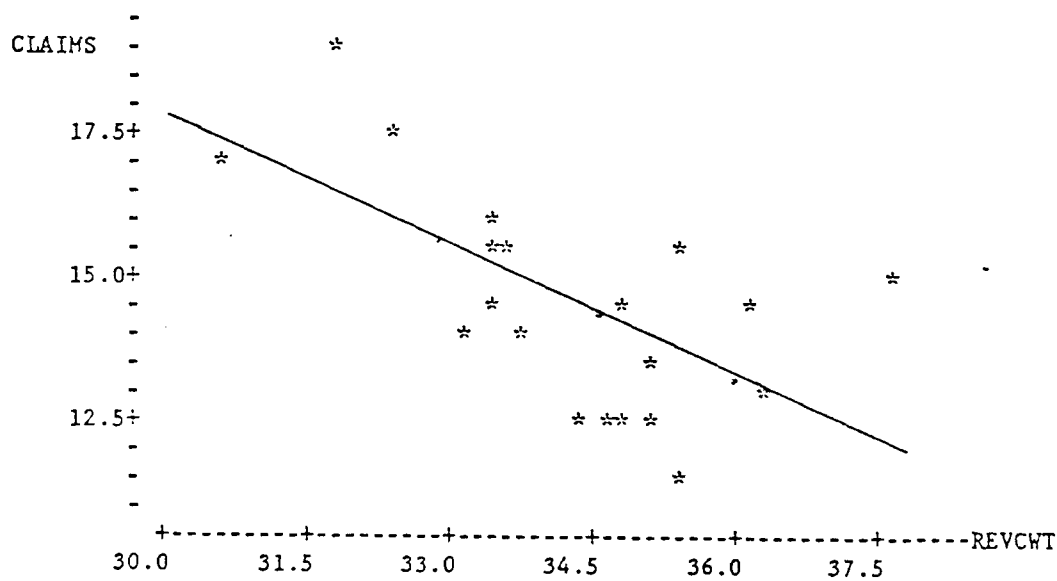
A	B	C	D	E	F	G	H
SCAC	CARRIER	NUMBER SHIPMENTS	CARRIER REVENUE	CARRIER BILLED WEIGHT	CARRIER REVENUE PER DWT	ACTUAL NUMBER CLAIMS	ACTUAL CLAIM FREQUENCY
					D/(E/100)		G/C
BWFD	BURNHAM WORLD FORWARDERS	1,354	2,139,223	6,046,084	35.38	208	15.36%
ATVL	ATLAS VAN LINES	4,695	7,553,405	21,791,485	34.66	577	12.29%
UNVN	UNITED VAN LINES	5,154	8,710,904	24,773,238	35.16	639	12.40%
SHVL	SHERWOOD VAN LINES	2,968	4,273,120	13,159,970	32.47	519	17.45%
CVLF	CVL FORWARDERS	764	1,210,365	3,477,229	34.91	112	14.46%
BVLG	BEKINS VAN LINES	3,720	5,975,241	17,053,472	35.04	494	13.25%
ALLV	ALLIED VAN LINES	5,994	9,592,247	27,129,702	35.74	685	11.42%
WHTN	WHEATON VAN LINES	3,064	5,081,333	13,989,991	36.32	402	13.15%
INVA	INTERSTATE VAN LINES	2,196	4,638,518	14,596,935	31.78	421	19.17%
ACEK	ACE MOVING AND STORAGE	262	323,357	1,012,866	33.41	41	15.65%
AMM	ALL MODE TRANSPORTATION	995	1,576,008	4,663,954	33.79	139	17.97%
NAVL	NATIONAL VAN LINES	1,769	2,831,300	7,826,631	36.19	254	14.36%
ISRS	INTERSTATE RELOCATION	337	462,593	1,508,308	30.67	57	16.91%
AMVA	AMERICAN VAN FAC	1,066	1,618,211	4,833,430	37.62	155	14.92%
ACVA	ACE VAN AND STORAGE	1,599	2,535,129	7,594,492	33.38	230	14.35%
AFPV	FALL ARDEN VAN LINES	3,540	5,833,758	17,624,535	33.10	554	14.06%
CVLD	CARTWRIGHT VAN LINES	2,130	3,267,901	9,734,643	33.57	329	15.45%
GLUL	GLOBAL VAN LINES	2,859	4,719,531	13,534,110	34.87	362	12.57%
LYVL	LYON VAN LINES	2,281	3,627,784	10,862,406	37.40	367	16.09%
NCAM	NORTH AMERICAN VAN LINES	5,919	9,523,207	27,668,746	34.42	746	12.64%
TOTALS		53,067	85,708,595	249,880,727	34.44	7257	13.75%
TOTAL CODE 1		222,068	333,394,737	1,036,524,015	32.10	29453	17.26%
% OF DOD CODE 1		23.90%	25.71%	23.96%		24.78%	

NOTES: NUMBER OF SHIPMENTS, WEIGHT, AND REVENUE FROM  
PPDMS/STATS/C-W-DA MIMO PRINTOUT OF 4/14/88.  
CLAIMS DATA FROM PPDMS/CLAIMS/G-PAID MIMO  
PRINTOUT OF 4/15/88.

Minitab, a statistical computer package, was used for the regression. The author entered information on carrier revenue per hundredweight (column F in the table) and claim frequency (column H in the table). Notable Minitab results include:

- a. The relationship between revenue per hundred weight and claims frequency is linear (can be represented by a straight line). The regression figure appears below. The linear regression formula for this regression is:

$$\text{Claims Frequency} = 39.5 - (0.728 \times \text{Revenue CWT})$$



- b. The linear correlation coefficient, a single number that can describe the strength of a linear relationship between two variables is:

$$-0.606$$



This suggests that there is a fairly strong negative linear correlation or relationship between revenue per hundredweight and claims frequency. In other words, as carrier's rates decrease, the probability of more loss and damage increases.

- c. The author also performed a t-test to determine whether the slope of the regression line is not zero and, hence, revenue per hundredweight has a significant effect on claims frequency. The following procedure was used [Ref. 25:p. 543]:

STEP 1: State the null and alternative hypothesis.

The null and alternative hypotheses are:

$H_0$ : Slope = 0

$H_a$ : Slope  $\neq$  0

STEP 2: Decide on a significance level.

The significance level is 5% (0.05).

STEP 3: Determine the critical values with a 5% significance level and 20-2 degrees of freedom.

Using the INVCDF (inverse cumulative distribution function) in Minitab, the critical values for a 5% significance level and 18 degrees of freedom, the critical values are  $\pm 1.7291$ .

STEP 4: Compute the value of the test statistic.

Minitab computes the test statistic automatically. For this regression, the test statistic is  $t = -3.29$ .

STEP 5: If the test statistic value falls in the rejection region (greater than  $+1.7291$  or less than  $-1.7291$ ), reject the null hypothesis; otherwise, do not reject the null.

The test statistic was  $-3.29$ . This value is less than  $-1.7291$ . Thus the null hypothesis is rejected.

STEP 6: State the conclusion in words.

Evidently, the slope of the regression line is not zero and, hence, revenue per hundredweight is a useful negative predictor of claims frequency.

Based on the regression analysis, the carriers' claim that low rates may lead to reduced service may be true. This was not unexpected. The Military Traffic Management Command may want to do further research on this phenomenon to ensure that low rates do not further erode moving service. A rate floor of some sort may be appropriate.

Under the current rate acquisition program, low rate carriers (who often have lower scores than more service conscious carriers) will get the military's household good shipments first. CERS only appears to be an incentive to improve performance when carriers are in equal rate groups.

How CERS scores shipments going into and out of storage-in transit (SIT) was cited as the next major criticism. Under CERS, shipments going into or out of SIT are scored in the same fashion as a normal shipment [Ref. 2:pp. 2-45 to 2-46]. For example, if a carrier agrees to pick up a shipment from the SIT site on a particular date and fails to pick up the shipment on that date, the carrier will not earn the 33 points for on-time pickup. The carriers and both industry groups interviewed recommended that this area not be scored if it does not adversely impact the member. In other words, if the final delivery is made on time, the carrier should not be "penalized" for missing the pickup from the SIT facility.

In response to this criticism, a former Director of Personal Property for the Army noted that transit times for

all aspects of a military move (including delivery to and from an SIT facility) are based on agreements between the moving industry and MTMC. Normally, the transit times are based on commercial transit schedules published by carrier bureaus. The moving industry is consulted and agrees to these moving times prior to entering into contracts to move household goods. Like any other contract, carriers should agree to perform within the terms of the contract. If they cannot pick up or deliver goods from the SIT facility within established time frames, they should not earn full CERS credit. If there is a problem with transit times, carriers should approach MTMC with proposed schedule changes. [Ref. 26]

That carrier scores can be determined from as little as one shipment was the third major criticism. As an example, XYZ Van Lines hauls one shipment from Oakland, CA to Norfolk, VA during the May to October 1987 CERS cycle. It earns a 100 CERS score for this shipment. BCD Van Lines hauls 50 shipments from Oakland to Norfolk during the May to October 1987 cycle. BCD's average score for the 50 shipments is 97.75. In the next rate cycle, both XYZ and BCD file the same rates for the Oakland to Norfolk traffic channel. XYZ, based on its 100 CERS score for a single shipment, will be placed on the TDR prior to BCD thus receiving traffic prior to BCD. While this does appear to be an unfair situation in some respects, the author could find no evidence that this

particular problem was adversely impacting any of the carriers interviewed or the carrier industry in general.

Other CERS criticisms stated by moving industry officials are briefly discussed as follows:

Carrier Evaluation and Reporting System administrators appear to be poorly trained. One large national van line reported that four out of five CERS forms received were incorrect. In addition, this same van line reported that 77% of the appeals that it submits to MTMC concerning CERS scores were approved. To the moving official interviewed, an appeal approval rate of 20 to 30 percent would be normal. An appeal approval rate as high as 77% does indicate that there may be some training problems.

Loss and damage information is based on a service member's estimate. As discussed in the previous section, exceeding high or low damage estimates can have a significant effect on a carrier's score. Clearly, a system that would allow actual claims data to be used vice estimates is preferable.

This section described the major criticisms of the present CERS program as described by representatives of the moving and storage industry. In general, most interviewees indicated that the CERS program is a relatively ineffective quality assurance tool since a carrier's rate and not service is the primary determinant used by MTMC to allocate personal property traffic.

#### D. IMPROVING CERS: DOD AND MOVING INDUSTRY RECOMMENDATIONS

The second interview question asked participants to describe their recommendations for improving the current CERS program. The results are presented in Tables 6 and 7. This section will discuss and analyze those recommendations.

##### 1. Department of Defense Recommendations

The primary recommendation made by DOD officials was to bring the service member back into the move evaluation process.

TABLE 6: IMPROVING CERS-RESPONSES TO INTERVIEW  
QUESTION #2 BY DOD QUALITY ASSURANCE AND CERS PERSONNEL

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#### RECOMMENDATIONS

1. Bring the service member back as an active participant in the move evaluation process
  2. Automate CERS
  3. Improve CERS training
  4. Score tender of service elements
  5. Combine CERS and ICERS
  6. Tighten the appeals process
  7. Use actual claims data
  8. Impose stronger penalties
-

TABLE 7: IMPROVING CERS--RESPONSES TO INTERVIEW QUESTION #2  
BY MOVING INDUSTRY REPRESENTATIVES

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RECOMMENDATIONS

1. Do not deduct points for missed pickup or delivery to storage-in-transit facilities
  2. Use actual claims data
  3. Combine CERS and ICERS
  4. Require tougher enforcement of backup regulations
- 

As discussed previously, the ITO and the carrier receive little, if any, feedback directly from the person most affected by the move: the service member. The only service member feedback ITOs receive comes from written comments the member may make on the DD Form 1840 or by the service member contacting (by telephone or in person) the ITO.

Past attempts at using customer input as a scoring mechanism have failed. Still, it would be desirable to have some type of customer feedback system that would allow a service member to comment on his or her move. The Department of Defense states that the service member is [Ref. 27:p. 17]:

. . . one of the best inspectors the government has. [They] know what types of services were received, and [their] opinion about them is valuable.

How valuable is the service member's input if there is no established forum for collecting customer feedback? The Military Traffic Management Command may want to consider some

type of alternative system(s) to ensure that service member inputs are received and acted upon. Two possible alternatives are the use of telephone surveys and toll-free (800) phone numbers [Ref. 28:p. 18].

Automating the Carrier Evaluation and Reporting System was the second most common recommendation. The Military Traffic Management Command is currently involved in automating the entire personal property function with the installation of a new computer system. This system, called the Transportation Operational Personal Property Standard System or TOPS, is scheduled to be in operation at all 283 CONUS personal property offices by 1990 and all 181 overseas personal property offices by 1992 [Ref. 29]. TOPS will automate the following functions [Ref. 29]:

- a. Counseling
- b. Outbound processing
- c. Inbound
- d. Quality assurance
- e. Non-temporary storage

The CERS function will be part of the quality assurance module. This module will automatically produce the Shipment Evaluation and Inspection Record--DD Form 2223 as well as the Carrier Evaluation Worksheet/Report--DD Form 2224, generate letters of warning and suspension, maintain carrier performance files, and update Traffic Distribution Rosters with CERS performance scores. A telecommunications

plan is being developed to electronically link all personal property activities with on another. This means that CERS data can be electronically transmitted from destination to origin and vice versa. The Transportation Operational Personal Standard System should improve processing times, eliminate many clerical errors, and possibly reduce the amount of paperwork CERS administrators handle. [Ref. 29]

Other recommendations include:

Improving CERS training. As stated in the previous section, little formal training is available to most CERS administrators. One training initiative that may warrant consideration is the development of an exportable Quality Assurance/CERS course. Such a course could be developed by MTMC or one of its field activities and sent in video tape format with corresponding study guides to the ITO's. This could be accomplished fairly easily and at low cost (no TAD or instructor funding requirements) and would ensure that all new CERS administrators are given uniform training on the program. In addition, MTMC should review the service school curriculum to ensure that curriculums are uniform and provide adequate training to personal property quality assurance personnel on the intricacies of CERS and other quality assurance programs.

Tender elements should be scored. The three officials who made this recommendation felt that tender elements more accurately describe moving service quality. As



stated earlier, two officials recommended a new system using a 25% split among four scored performance factors: on-time pickup, on-time delivery, absence of loss and damage, and compliance with tender elements.

At one time, tender elements were scored in the CERS program. Under the initial CERS program, 33 separate elements (22 tender elements, eight customer service elements, on-time pickup, on-time delivery, and absence of loss and damage) were scored. However, it soon became apparent that rating each carrier on 33 scoring elements was "overly complex and of limited usefulness" and it "created an administrative burden due to the immense amounts of paperwork involved." [Ref. 30:p. 2] Due to the problems cited above and other criticisms by both the GAO and the moving industry, tender elements and customer service elements are no longer scored.

Combine the CERS and ICERS programs into one program.

The International Carrier Evaluation and Reporting System was implemented in late 1987 to evaluate international TGBL shipments. It is similar to the CERS program in many respects. Both programs [Ref. 2:pp. 2-11]:

1. Provide incentives to carriers by offering more tonnage to the low rate carrier based on their CERS or ICERS score.
2. Grade the same performance elements; although, the ICERS program assigns point values to the elements differently. Under ICERS, ability to meet the RDD earns 50 points, absence of loss and damage earns 30 points, and meeting the pickup date earns 20 points.

3. Use an 85 average shipment score as the minimum acceptable score.
4. Evaluate carriers using a six month performance cycle.
5. Use the DD Form 1840 as the primary source document to develop estimated dollar values on loss or damaged items.

The ICERS program uses the Shipment Evaluation and Inspection Record--DD Form 1780 for inspection and scoring. See Figure 13. Examination of this form reveals that it is very similar to its CERS counterpart. Combining the two systems would simplify matters considerably for both CERS administrators and the moving industry and reduce, to some extent, the paperwork generated by two separate systems.

Tighten the appeal process. Several officials indicated that the appeals process was not clearly defined enabling many carriers to "win" many appeals even when poor service was provided. They recommended that the PPTMR (specifically, the tender of service) be revised or some type of guidance be issued from MTMC that better describes what actions are grounds for appeals and what are not.

Use actual claims in the scoring process. One official recommended that a claims ration (number of claims divided by number of shipments), using actual claims information, should be used in the scoring process. If a carrier exceeded the claims ratio, the carrier should be suspended for a pre-determined period. This evaluation

SHIPMENT EVALUATION AND INSPECTION RECORD					1. DATE	REPORT CONTROL SYMBOL MTMC-156 (R-2)
2. MEMBER'S NAME		3. GRADE	4. COMPONENT	5. CARRIER		SCAC
6. PPGBL/ORDER NUMBER		7. ORIGIN PPSO	GBLOC	8. DESTINATION PPSO	GBLOC	9. CODE OF SERVICE
10. PICK UP ADDRESS (Street, City, State, Zip Code)			11. DELIVERY ADDRESS (Street, City, State, Zip Code)		12. DESTINATION CONTROL AREA	
13. PICK UP DATE (YYMMDD)	14. FROM MTS?	15. MISSED PICK UP?	16. RDD	17. SIT?		
18. DATE IN SIT (YYMMDD)	19. DATE OUT OF SIT (YYMMDD)	20. DELIVERY DATE (YYMMDD)	21. EST. LOSS/DAMAGE	22. TYPE LOSS/DAMAGE		
23. DATA SOURCE	24. ORIGIN WEIGHT	25. DESTINATION WEIGHT	26. CUSTOMER SATISFACTION	27. T/S VIOLATIONS		
28. SHIPMENT INSPECTION (Indicate violations noted in block 27)						
TENDER OF SERVICE VIOLATIONS		IN	Failed to provide required documents to PPSO		M	
Failed to perform premove survey (if applicable)		A	Failed to provide required documents to member		N	
Improperly packed/loaded shipment		B	Failed to unpack/reassemble		O	
Inadequate packing material		C	Failed to comply with SIT requirements		P	
Packed inventory improperly		D	Containers not properly marked		Q	
Prepared DD 619-1/DD 1840 improperly		E	Failed to protect containers from weather		R	
Used unqualified personnel		F	Failed to pack, weigh, and enter PBP&E on inventory/PPGBL		S	
Improperly serviced/deserviced appliances		G	Failed to report shipment in weekly report		T	
Folded/failed to properly roll rug(s)		H	UBMHG containers failed to meet specifications		U	
Failed to record loss/damage		I	Failed to notify PPSO of inability to meet RDD		V	
Failed to weigh shipment IAW manner prescribed by ICC		J	Failed to trace within 24/48 hours (As applicable)		W	
Failed to remove packing materials/debris		K	Failed to notify PPSO of arrival/delivery		X	
Failed to reweigh when requested		L	Failed to containerize at residence		Y	
29. REMARKS						
30. ORIGIN INSPECTOR		31. DESTINATION INSPECTOR		32. SHIPPING OFFICE REPRESENTATIVE		
a. SIGNATURE		a. SIGNATURE		a. SIGNATURE		
b. DATE SIGNED		b. DATE SIGNED		b. DATE SIGNED		
33. THIS SERVES AS NOTICE OF:						34. EFFECTIVE DATE
a. WARNING		b. SUSPENSION FOR ____ DAYS		c. REINSTATEMENT		

DD Form 1780, MAY 86

Previous editions are obsolete.

SEE INSTRUCTIONS TO THE COPY

Figure 13: Shipment Evaluation and Inspection Record--DD  
Form 1780 [Ref. 2:p. 2-57]

criterion would be in addition to the normal quality assurance procedures currently in place.

Stronger punitive penalties are needed. Several officials indicated that the current penalties are nothing more than slaps on the wrists of most carriers. They advocated stronger penalties (doubling the suspension and disqualification periods or reducing the amount of traffic carriers could qualify for) that would send a direct message to all carriers that poor service will not be tolerated.

One possibility is a suspension program similar to that used in the ICERS program. In the international program [Ref. 31:p. 10]:

the degree to which a carrier has been able to meet the performance standards will determine the period of time for which the carrier is denied the opportunity to participate in the award of traffic from an installation, as shown below:

<u>Semiannual Evaluation Score</u>	<u>Traffic Denial Period</u>
75-84.99	60 days
50-74.99	120 days
0-49.99	180 days

Such a program, in conjunction with the disqualification process, would sufficiently eliminate the true poor performing carriers from the domestic program.

## 2. Moving Industry Recommendations

In general, most moving industry representatives thought that the CERS program did not provide any incentive for a carrier to improve its performance. Many felt that lower scoring carriers could simply bypass most service requirements by offering lower rates. No solutions to the rate cutting problems were offered by any moving industry official interviewed.

The primary recommendation made by moving industry officials was that points should not be deducted for missed delivery of pickup to and from the SIT facility. If the service member is not affected, i.e., his or her household goods arrive on the desired date, why should the carrier be "punished" for failure to deliver or pickup from the SIT facility on time? The Military Traffic Management Command may want to delete the requirement to score shipments going into or out of SIT. It does seem unfair to deduct points from a carrier's score for missing delivery times to or from the SIT facility when the shipment is eventually delivered on time.

Other recommendations were:

Actual claims data should be used. Using actual claims data vice estimates would enable MTMC to better determine which carriers actually have high incidence of loss and damage. The Military Traffic Management Command could then take action against the poor performing carriers. A

program that would use actual claims data in the CERS and subsequent traffic allocation has been developed by the U.S. Air Force. This program, Total Cost Transportation, will be discussed in the section entitled Recent Quality Assurance Initiatives.

Tougher enforcement of backup regulations. One moving industry official recommended that ITO's not be so "wishy-washy" in the enforcement of backup regulations which govern tender violations or customer service problems. If, for example, there was evidence of deliberate damage to a service member's possessions by the carrier, the ITO should immediately suspend the carrier. The moving industry official stated that many ITOs would probably issue a letter of warning instead. In his opinion, a letter of warning does not send the appropriate message to the carrier that poor service is not acceptable.

This section has described recommendations by both DOD and moving industry officials as to how the CERS program and personal property quality assurance can be improved. The author was somewhat surprised by the relative lack of any further concrete recommendations by both parties. Both parties agree that there are some fundamental problems with the personal property quality assurance process, yet other than the general recommendations stated above, many officials could not provide any further specific

recommendations on how CERS and quality assurance in general can be improved.

Are there other alternatives to the present CERS system that may improve carrier service? The next section tries to answer this question by discussing some alternative systems used by firms external to the Department of Defense. The section that follows discusses two recent DOD quality assurance initiatives that will further enhance MTMC's ability to improve carrier service.

#### **E. ALTERNATIVE QUALITY ASSURANCE SYSTEMS**

Carrier evaluation is not a unique function accomplished only by the military. Private companies and other governmental agencies have developed their own personal property quality assurance systems to ensure that proper moving service is received. The author conducted telephone interviews with eight large private companies and two public agencies to determine what types of alternative carrier evaluation and control systems exist and to determine whether elements from these systems could be incorporated into the CERS program. These companies and organizations are listed in Appendix C. This section present the interview results.

The most important interview result was the impact employee feedback had on the move evaluation process. With no exceptions, all ten programs used information provided by the employee (the service member in DOD language) as the primary mechanism to evaluate and judge carrier performance.

<b>3M Household Goods Move Evaluation Report</b>		Date _____
Form 2850 - A - PWD		
To: _____		
From: Al Altman ★ Travel Services- 224-1E-03		
In order to help us improve moving van line services for 3M employees, please complete and return this form within two weeks.		
Carrier _____	Origin _____	Destination _____
Actual Pick Up Date _____		
Actual Delivery Date _____		
Was Adequate Pre-Move Assistance Provided By:		
3M Transportation Department?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Household Goods Moving Company?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Were The Dates Requested Satisfactorily Met—		
Packing?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Loading?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Delivery?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Were The Drivers And The Helpers Courteous, Neat And Clean?		
	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Were The Goods Professionally Packed In New-Condition Paper And Cartons?		
	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Were Beds Set Up, Furniture Arranged, Etc.?		
	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Was Unpacking Performed By: <input type="checkbox"/> Driver <input type="checkbox"/> Agent <input type="checkbox"/> Myself		
If Applicable, Is Carrier Or UNIRISC Taking Action To Assist You:		
In Filing Loss/Damage Claim?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
To Repair Damaged Furniture?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Would You Recommend This Mover To Another 3M Employee?		
	<input type="checkbox"/> Yes	<input type="checkbox"/> No
How Would You Rate This Move? <input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor		
Additional Comments: _____ _____ _____ _____		
<b>For Transportation Use Only</b>		
O	L/H-	1 2 3 4 5
R	TTL-	1 2 3 4 5
N	Ml-	Pounds _____
Return All Copies To: Al Altman Travel Services Building 224-1E-03, 3M Center St. Paul, MN 55144-1000		

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1. Name of Carrier: \_\_\_\_\_

2. Name of Employee: \_\_\_\_\_

3. New Address: \_\_\_\_\_

4. New Home Number: \_\_\_\_\_ Business Number: \_\_\_\_\_

5. ORIGIN

a. Was packing service performed on date requested? \_\_\_\_\_

b. Was packing service performed at time scheduled? \_\_\_\_\_

c. Were packers neat, courteous and efficient? \_\_\_\_\_

d. Were cartons properly identified as to contents? \_\_\_\_\_

e. Were cartons fully packed? \_\_\_\_\_

6. DESTINATION

a. Did you request unpacking? \_\_\_\_\_

b. Were all cartons packed by the mover also unpacked by him as you requested? \_\_\_\_\_

7. CLAIMS FOR LOSS AND/OR DAMAGE

a. Was there loss or damage on your move? \_\_\_\_\_

b. If so, did you note this on the delivery receipt or the inventory sheet? \_\_\_\_\_

c. Did mover provide you with necessary claim forms? \_\_\_\_\_

8. Were the drivers and other personnel courteous, careful, and cooperative? \_\_\_\_\_

9. How would you rate the overall service of this mover?

( ) Excellent ( ) Good ( ) Fair ( ) Poor

10. REMARKS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Please complete this form after moving and mail to:

Bristol-Myers Company  
 345 Park Avenue  
 New York, NY 10154  
 (212) 546-4002

Figure 15: Bristol-Myers Company Household Goods Evaluation

**GENERAL MOTORS CORPORATION  
HOUSEHOLD GOODS CARRIER PERFORMANCE REPORT**

EMPLOYEE NAME \_\_\_\_\_  
 MOVED FROM \_\_\_\_\_ DATE \_\_\_\_\_  
 MOVED TO \_\_\_\_\_ DATE \_\_\_\_\_

General Motors is interested in the level of service employees are receiving from household good carriers. Your assistance is needed to evaluate carrier service. Please complete this form and return to the location shown below. Thank you for cooperating.

Use these categories to rank your move: 1. Excellent; 2. Good; 3. Fair; 4. Poor

Rating  
(Circle One)

**ORIGIN:**

1. Communication of sufficient, meaningful pre-move information.
2. Packers arrival on time, or \_\_\_\_\_ late.
3. Packers use of proper, adequate materials.
4. Packing completed in a careful, professional, timely manner.
5. Crew appearance and conduct.

1 2 3 4  
 1 2 3 4  
 1 2 3 4  
 1 2 3 4  
 1 2 3 4

**DESTINATION:**

1. Van arrival at destination on time, or \_\_\_\_\_ late.
2. Crew appearance and conduct.
3. Delivery service performance (unloading, unpacking care and timeliness).
4. Communication during and after the move by van line/agent personnel.
5. Is a written claim necessary?
6. Would you request van line in future and recommend to others.

1 2 3 4  
 1 2 3 4  
 1 2 3 4  
 1 2 3 4  
 YES NO  
 YES NO

COMMENTS: Additional information regarding service and needed improvements.

EMPLOYEE SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
 RETURN TO: \_\_\_\_\_

**Figure 16: General Motors Corporation Household Goods Carrier Performance Report**

Dear :

Now that your move is complete, we are interested in knowing if all of the various stages regarding your move were performed satisfactorily.

Any of your suggestions will be greatly appreciated and will, hopefully, improve your future moves or the moves of your co-workers.

1. Were you satisfied with the move? If not, why?
2. Were all expected services performed?
3. In your opinion, were all segments of your move on schedule?
4. Were you treated with courtesy throughout your move?
5. Would you use this moving company in a future move?
6. Are there any changes or additions you can suggest that we make regarding household moves?

Thank you for your help.

Sincerely,

Director of Logistics

DFB:rea  
MOVINGP

Figure 17: Welchs' Foods Household Goods  
Move Evaluation

ADDENDUM

TO YOUR KNOWLEDGE, were any of the following services performed by the mover?

- a) sending boxes to your home prior to move to begin your own packing? \_\_\_\_\_
- b) taking miscellaneous furniture to city dump? \_\_\_\_\_
- c) removal/installation of curtain rods? \_\_\_\_\_
- d) extensive dismantling of any pieces of furniture and re-assembling of same? \_\_\_\_\_
- e) removal of wall fixtures (lights, etc.) and/or connecting of same at new home? \_\_\_\_\_
- f) third-party/outside professional service for disconnecting appliances and re-connecting same? \_\_\_\_\_

\*On your move day, did movers ask you to sign a form indicating additional labor services such as the ones mentioned above? \_\_\_\_\_

If other additional services were rendered, please indicate them below:

---

---

---

---

---

Figure 18: Welchs' Foods Addendum Sheet



## HEWLETT-PACKARD

### HOUSEHOLD MOVE POST MOVE QUESTIONNAIRE

FROM: \_\_\_\_\_ MAIL STOP: \_\_\_\_\_  
EMPLOYEE NAME: \_\_\_\_\_ CARRIER: \_\_\_\_\_  
MOVED FROM: \_\_\_\_\_ MOVED TO: \_\_\_\_\_

HEWLETT-PACKARD STRIVES TO PROVIDE THE BEST MOVING SERVICES AVAILABLE FOR ITS EMPLOYEES. IT IS EXTREMELY IMPORTANT TO MONITOR CARRIERS ACTIVITIES TO INSURE THAT ALL RELOCATING EMPLOYEES ARE RECEIVING THE PRESCRIBED SERVICES.

FEEDBACK FROM EMPLOYEES IS VITAL TO THE EVALUATION PROCESS. PLEASE COMPLETE THE QUESTIONS LISTED BELOW AND RETURN THE FORM TO THE INITIATOR. PLEASE FEEL FREE TO INCLUDE WRITTEN COMMENTS IN THE SPACE PROVIDED OR ON THE BACK OF THE FORM.

#### SURVEY AT ORIGIN:

YES NO

1. DID THE PACKERS ARRIVE AT AGREED TIME? \_\_\_\_\_
2. WERE YOU LOADED ON THE DAY REQUESTED? \_\_\_\_\_
3. WERE THE MOVERS HELPFUL AND COURTEOUS? \_\_\_\_\_

#### SURVEY AT DESTINATION:

YES NO

1. WAS THE DELIVERY WITHIN THE AGREED TO DATES? \_\_\_\_\_
2. WERE YOUR GOODS IN SATISFACTORY CONDITION? \_\_\_\_\_
3. HAVE YOU REPORTED ANY DAMAGE? \_\_\_\_\_
4. WAS UNPACKING REQUESTED? \_\_\_\_\_
5. DID THE MOVERS UNPACK THE ITEMS YOU REQUESTED? \_\_\_\_\_
6. WERE YOUR GOODS PLACED WHERE YOU DIRECTED? \_\_\_\_\_
7. WERE THE MOVERS HELPFUL AND COURTEOUS? \_\_\_\_\_

HOW WOULD YOU RATE THE OVERALL SERVICE?

GOOD \_\_\_\_\_ FAIR \_\_\_\_\_ POOR \_\_\_\_\_

COMMENTS: (SPECIFICALLY IF SERVICE RATING IS POOR)

Figure 19: Hewlett-Packard Household Move  
Post Move Questionnaire

# IBM EMPLOYEE MOVE EVALUATION

TO ASSIST IBM IN EVALUATING THE SERVICES PROVIDED BY YOUR MOVER DURING YOUR RECENT RELOCATION, PLEASE TAKE A MOMENT TO COMPLETE THIS QUESTIONNAIRE.

EMPLOYEE NAME \_\_\_\_\_ DATE OF MOVE \_\_\_\_\_

EMPLOYEE STREET ADDRESS, STATE AND ZIP \_\_\_\_\_

ORIGIN LOCATION \_\_\_\_\_ DESTINATION LOCATION \_\_\_\_\_

NATIONAL MOVER \_\_\_\_\_ AGENT \_\_\_\_\_

A) HOW WELL SATISFIED WERE YOU WITH YOUR MOVER'S PERFORMANCE OF THE FOLLOWING SERVICES?

	SATISFIED	DISSATISFIED
PACKING AND OTHER ORIGIN SERVICES	_____	_____
LOADING AND DELIVERY SERVICES	_____	_____
UNPACKING AND OTHER DESTINATION SERVICE	_____	_____

B) DID YOU INCUR ANY DAMAGE? NONE \_\_\_\_\_ SOME \_\_\_\_\_ EXTENSIVE \_\_\_\_\_

C) WOULD YOU USE THIS MOVER AGAIN? YES \_\_\_\_\_ NO \_\_\_\_\_

IF NO, PLEASE PROVIDE COMMENTS IN SECTION D.

D) PLEASE PROVIDE ADDITIONAL COMMENTS TO ASSIST IN IMPROVING QUALITY OF SERVICE: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

THANK YOU FOR YOUR COMMENTS!

MANAGER OF NSD TRAFFIC CONTRACTS

Figure 20: IBM Employee Move Evaluation



TENNECO OIL EXPLORATION & PRODUCTION  
(COMPANY)

INTEROFFICE COMMUNICATION

### HOUSEHOLD GOODS MOVE EVALUATION

You can help us get better household goods moving services for Tenneco employees by answering the following questions and by letting us have your comments about the service you received.

1. Was the move handled to your satisfaction? ☐ Yes ☐ No
2. Were the movers prompt and courteous? ☐ Yes ☐ No
3. Were they careful in handling your goods and in protecting your property? ☐ Yes ☐ No
4. Was their packing material clean? ☐ Yes ☐ No
5. Would you recommend these movers to others? ☐ Yes ☐ No
6. Did the moving company provide the packing material? ☐ Yes ☐ No
7. Did the moving company pack your household goods? ☐ Yes ☐ No
8. Did the moving company unpack your household goods? ☐ Yes ☐ No

#### COMMENTS

---

---

---

---

---

When you have completed this questionnaire, please sign it and return it in an interoffice envelope to - Houston- MLM-1631

\_\_\_\_\_  
Employee Signature

Figure 21: Tenneco Oil Exploration and Production  
Household Goods Move Evaluation

# HOUSEHOLD GOODS CARRIER EVALUATION REPORT

**PRIVACY ACT NOTICE:** The information requested on this form is solicited under Title 38, United States Code, and will be used to monitor and control the household goods carrier's performance. The information may be furnished the carrier involved for his evaluation. Your disclosure of this information is voluntary and will aid in our overall mission of making certain transferees receive satisfactory performance in this shipment of their household goods.

This form is to be completed upon delivery of household goods to the new destination. FOLD AND MAIL

NAME AND PRESENT ADDRESS OF EMPLOYEE		OLD DUTY STATION	
		CURRENT BUSINESS PHONE NO.	HOME PHONE NO.
NEW DUTY STATION (include ZIP CODE)		PICK UP DATE	DELIVERY DATE
CARRIER NAME ON GBL		GBL NO.	GSA CONTROL NO.

PLEASE CHECK RESPONSE

WERE THE FOLLOWING SERVICES PROVIDED PROFESSIONALLY?	EXCELLENT	GOOD	FAIR	POOR	NOT APPLICABLE
• PACKING	_____	_____	_____	_____	_____
• LOADING	_____	_____	_____	_____	_____
• DELIVERY	_____	_____	_____	_____	_____
• UNPACKING	_____	_____	_____	_____	_____
• PERSONNEL COURTESY	_____	_____	_____	_____	_____
• OVERALL QUALITY OF SERVICE	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> SATISFACTORY <input type="checkbox"/> UNSATISFACTORY				

WERE THE FOLLOWING SERVICES PERFORMED ON THE AGREED DATE(S)?	ON TIME	1 DAY LATE	2 DAYS LATE	3 DAYS LATE	4 OR MORE DAYS
• PACKING	_____	_____	_____	_____	_____
• PICKUP/LOADING	_____	_____	_____	_____	_____
• DELIVERY/UNPACKING	_____	_____	_____	_____	_____

ESTIMATED AMOUNT OF LOSS/DAMAGE? \$ \_\_\_\_\_

WOULD YOU USE THIS CARRIER AGAIN? ☐ YES    ☐ NO

REMARKS (Explain any item checked "POOR")

SIGNATURE OF EMPLOYEE	DATE
GENERAL SERVICES ADMINISTRATION GSA DC-8911801106	(See reverse for mailing instructions) GSA Form 3080 (REV. 10-8)

Figure 22: General Services Administration Household Goods Evaluation Report



In analyzing these sample customer satisfaction reports and interview results, some other common themes are apparent. First, most evaluation systems concentrate on those items which indicate satisfaction with the types of services received in addition to compliance with shipping times and absence of loss and damage. These "service items" are very similar to the tender of service elements which are listed but not scored in the CERS program. Second, the forms are relatively simple to complete as questions are relatively short and easy to understand by both the employee and company/agency personal property personnel. Third, all forms provide space for additional comments. Additional comments can be extremely helpful to help clarify yes/no or rating type (excellent to poor) answers and provide additional information that may not be covered by the questions asked. Fourth, most companies indicated that they had an aggressive follow up program to ensure that evaluation forms were returned. Minnesota, Mining, and Manufacturing (3M) initiates follow-up action on each move evaluation. As a result they were able to achieve a 92% return rate on over 1,000 moves in 1987 [Ref. 32]. Finally, six evaluation forms had questions asking employees if they would use the same carrier in the future. This one question, in conjunction with other questions, is often used to determine if that carrier will be allowed to conduct business with the firm or agency in the future.

Other important results were:

All companies/agencies evaluated carrier service on each and every move. With one exception (Bristol-Myers Company), results of moving evaluations are given to carriers in some format. Some organizations gave the carriers a copy of the move evaluation form as is done in the CERS program. Other organizations issue periodic reports to carriers summarizing carriers' scores. These reports are then used by both company/agency management and carriers to determine if proper service levels were obtained during a reporting period.

Many respondents indicated that they use their evaluation systems to both reward and discipline carriers. If the carrier performed well, that carrier would receive further business from that company or agency. If the carrier performed poorly, that carrier was usually dropped completely from handling that company's household goods traffic. There were no "suspension" periods or second chances.

The most important factors or measures used to evaluate and select carriers are service (five respondents), followed by the capability of the moving agent or company to handle a national account (two respondents). Service was selected as the most important factor for several reasons. The most important reason was that poor service hurts employee morale. Most of the personnel moved by these companies are valuable managerial personnel who are essential to the fiscal well

being of a company. A poor move may cause an employee to "jump ship." Considering the amounts of money that most companies have already invested in these individuals, losing employees due to poor moving service is not tolerated by most private firms.

Price was named as the primary factor for selecting a carrier by only one private company; however, price was the most important factor in selecting carriers by both the GSA and the General Services Agency of the State of California. Price and how it affects the carrier selection decision is probably the major difference between private and public sector personal property management. In the corporate world, carrier service is the driving force behind carrier selection. In the public sector, due in large part to the number of regulations and budget constraints that public agencies must operate under, price is the driving force in carrier selection. As demonstrated earlier, when price is used as the primary determinant in the carrier selection process, service may suffer.

Only one company offered any additional incentive to a moving company for providing excellent moving service. International Business Machines (IBM) through its Time Saver Program will pay a carrier an additional amount (amount varies with each move) for picking up or delivering a shipment on time. It will also monetarily penalize a carrier for late pick up and/or delivery. These "penalties" range

from \$175 to \$375 a day. International Business Machines's representative stated that such a program positively affects carrier service. [Ref. 34]

What conclusions, if any, can be drawn from the above results, and what items would be useful to include in the CERS program? First, employee feedback is an important part of the move evaluation process for most firms. Although highly subjective in nature, employee evaluations can often provide a better or truer picture of moving service than delivery or loss and damage statistics. It is the author's opinion that the service member should be brought back into the carrier evaluation process.

Second, MTMC may want to consider some type of monetary incentive or punishment program similar to IBM's. Top performers could be awarded bonuses for excellent service in addition to more tonnage. Money is still a very powerful motivator in an industry where profit margins are often very small. The net profit margin, net profit as a percentage of sales, for the moving industry in 1985 was only 2.74. [Ref. 15:p. 20]

#### **F. RECENT QUALITY ASSURANCE INITIATIVES**

The Military Traffic Management Command and the respective military services' Personal Property Directorates are constantly searching for new ways to improve the military moving process. This section discusses two new Department of

Defense initiatives that have been developed to assist MTMC and the services in evaluating and controlling carrier performance. The first initiative, the New Released Valuation on Through Government Bill of Lading (TGBL) Personal Property Shipments, was implemented by MTMC in April 1987. This initiative's primary objective is to encourage carriers to provide better moves by making the carriers more accountable, in monetary terms, for loss and damage. The second initiative, the Total Cost Transportation (TCT) concept, is a project developed by Headquarters, United States Air Force (Personal Property Branch, Transportation). Total Cost Transportation's primary objective is to use actual claims data vice estimates in conjunction with the CERS program to award household goods traffic. Total Cost Transportation's present status is on hold pending the results of the New Released Valuation program, the implementation of TOPS, and resolution of claims processing differences among the services [Ref. 34]. What follows is a description of these two initiatives.

#### 1. The New Released Valuation Program

From 1967 to April 1987, all domestic carriers (interstate and intrastate), were liable for loss or damage at the rate of 60 cents per pound per article. For example, if a carrier lost a 200 pound refrigerator worth \$700, the carrier was liable to the government for the depreciated value up to a maximum of \$120.00 (200 pounds times \$0.60).

The government paid the rest of the claim to the member (\$580). [Ref. 35:p. 6]

Effective 1 April 1987 for intrastate and 1 May 1987 for interstate shipments, carriers are now liable for the full depreciated value of lost or damaged articles up to a maximum amount based on total net shipment weight times \$1.25 per pound. Carrier liability should increase since liability is no longer computed on a per-article basis. [Ref. 36:p. 8]

Under the new procedures there are three options that a service member can choose from. The three options are Basic Coverage (New Released Valuation), Option 1 (Higher Released Value), and Option 2 (full Replacement Protection).

Under Basic Coverage (New Released Valuation), the shipment valuation (the value in dollar terms of a shipment) is calculated at \$1.25 times net shipment weight. The government, not the member, pays all costs for Basic Coverage. The Maximum Allowance List--Depreciation Guide is used to determine maximum levels the government is liable for household good that are lost or damaged based on an item's depreciated value. For example, a 10,000 pound shipment would have a total carrier liability of \$12,500 (10,000 pounds times \$1.25). If a member submitted a claim due to damage to a refrigerator (\$200 in damage) and loss of an oriental rug (\$5,000 when bought new but a depreciated current value of \$2,500), the carrier is liable to the government for the full amount \$2,700. When settling the

claim, the government initially pays the member \$1,700 (\$200 for the refrigerator damage and \$1,500 for the rug) The government is limited to \$1,500 for the rug due to the maximum amounts prescribed in the Maximum Allowance List--Depreciation Guide for an oriental rug. Once the carrier pays the liability to the government or the liability has been set-off<sup>8</sup>, the member will then be paid the additional \$1,000. [Ref. 36:p. 2]

Under Option 1, (Higher Released Value), the service member pays for additional coverage beyond the basic coverage. As an example, a service member requests Option 1 for her 10,000 pound shipment and asks that her coverage be increased to \$2.50 per pound. The service member pays the difference for the increased valuation. Carrier liability in this example would be \$25,000.

Under Option 2, (Full Replacement Protection), the service member pays for additional coverage beyond the basic coverage. The carrier is responsible for repairing or replacing missing or damaged articles at their full replacement value (the Maximum Allowance List--Depreciation Guide does not apply under Option 2). Additionally, settlement of the claim is between the carrier and the

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<sup>8</sup>Set-off is a debt-collection procedure used by the government to collect money owed to it. Under set-off procedures, the government will collect the money owed by deducting the same amount that it owes a carrier under another TGBL.

service member. If loss or damage does occur, the service member will submit his claim directly to the carrier for reimbursement. As an example, a service member paid for and received Full Replacement Coverage for his 10,000 pound shipment. During the shipment, a five year old oriental rug was lost. The rug's established or agreed upon replacement value was \$5,000. The service member would file the claim directly with the carrier and upon settlement would receive the full replacement cost (\$5,000). [Ref. 36:p. 4]

In addition to the new valuation options, MTMC also established a separate charge to compensate carriers for the additional carrier liability requirements. The compensation rate is \$0.64 for every \$100 of shipment valuation in addition to transportation charges, plus an additional ten percent for any temporary charges. Current commercial tariffs include a separate compensation charge of \$0.50 per \$100 of shipment valuation. The moving industry does not use the \$0.50 rate with the military primarily because service member claims are settled by the government. In the commercial world, the carrier usually settles claims. In the New Released Valuation program, the military wanted to retain claims settlement authority and thus established the \$0.64 rate as fair compensation. The government compensates carriers at a higher rate because the moving industry felt that the government is more lenient in its claims processing procedures resulting in higher dollar value claims than



otherwise would occur if the moving company settled the claim with the service member. [Ref. 35:p. 8]

The New Released Valuation Program has been criticized by the moving industry. In March 1988, the General Accounting Office released a report on the new program entitled "Household Goods--Implications of Increasing Moving Companies' Liability for DOD Shipment." The main conclusion reached by the GAO was that they could not determine a fair and adequate level of compensation. Two reasons were given. First, it was too early to determine the program's impact on the carrier industry. The number and dollar amounts of claims are incomplete. Second, carriers' performance levels vary widely. Because of this, a single compensatory rate may not be perceived to be fair and adequate to all carriers. As an example, the GAO stated that [Ref. 35:p. 1]:

Because carrier performance levels vary widely, a single rate may not be perceived as fair and adequate by all carriers. For example, a rate that adequately covers the claim liability costs of a carrier that causes few claims would not be adequate to cover those of a poorly-performing carrier. Conversely, a rate that covers the claims liability costs of a poorly-performing carrier would result in overpayment to a better-performing carrier.

Furthermore the GAO stated that [Ref. 35:p. 1]:

. . . MTMC's new rate will compensate the better-performing carriers for increased liability costs if carriers perform as they did in fiscal year 1985, the most recent year for which adequate claims data was available at the time of our review. This rate should reduce government claims costs and should provide increased incentive for improved carrier performance.

Recent MTMC data, released after the GAO report, indicates the new program may be working. Table 8 lists DOD Domestic Code 1 and Code 2 shipment and claims data for two reporting periods (one prior to and one after the implementation of the New Released Valuation Program).

TABLE 8: CODE 1 AND 2 SHIPMENTS AND CLAIMS DATA  
[Ref. 37]

Period: 1 May 1986 - 30 April 1987					
<u>Code</u>	<u>No. of Shipments</u>	<u>No. of Claims</u>	<u>Amount Paid</u>	<u>Average</u>	<u>Claims/Shipments</u>
1	218,041	29,864	\$17,601,316	\$589.38	.137
2	1,514	261	\$200,440	\$767.97	.172
Totals	219,555	30,125	\$17,801,756	\$590.93	.137
Period: 1 May 1987 - 30 April 1988					
<u>Code</u>	<u>No. of Shipments</u>	<u>No. of Claims</u>	<u>Amount Paid</u>	<u>Average</u>	<u>Claims/Shipments</u>
1	125,537	10,112	\$5,401,875	\$534.20	.081
2	1,780	160	\$100,734	\$629.59	.090
Totals	127,317	10,272	\$5,502,609	\$535.69	.081

Note: Figures not adjusted for inflation.

The preliminary results (May 1987 to April 1988 data are still incomplete) indicate that there has been a significant reduction in the number of claims and a minor

reduction in the amount per claim since the New Released Valuation program was implemented. The claims ratio (number of claims divided by number of shipments) declined from 13.72% to 8.07% and the average claim amount declined from \$590.93 per claim to \$536.18 per claim. These initial results are encouraging. Further research is needed in this area to ensure that improving trends continue.

The New Released Valuation program is one of the most significant quality assurance programs to be developed since the advent of CERS. It puts the onus back on carriers to ensure that a service member's property is moved with as little loss and damage as possible. The next section discusses an innovative new program developed by the Air Force that uses actual claims data as a basis for traffic allocation: Total Cost Transportation (TCT).

## 2. The Total Cost Transportation (TCT) Program

The Total Cost Transportation program was developed in early 1982 in response to both GAO and moving industry criticism that estimated claims data vice actual claims data was being used as a basis for carrier evaluation [Ref. 38:p. 1] Under TCT, actual claims data is used to compute claims indexes for each carrier at each installation the carrier serves. The claims index is computed as follows:

$$\begin{array}{lcl} \text{CLAIMS} & & \text{DOLLARS OF ADJUDICATED CLAIMS PAID BY DOD} \\ \text{INDEX} = & & \text{TOTAL TONNAGE MOVED BY THE CARRIER PER} \\ & & \text{HUNDRED WEIGHT (CWT)} \end{array}$$

This claims index is then added to the carrier's rate to achieve the total cost or TCT. Total Cost Transportation is expressed in cost per hundredweight and is calculated every six months. The carrier's TCT is then compared against other carriers on a TCT Tonnage Distribution Roster (TCT TDR). Traffic is allocated based upon a carrier's comparative ranking on the TCT TDR. [Ref. 38:p. 2]

The TCT program is designed to be used in conjunction with the existing CERS program. Data for on-time pick up, on-time delivery, and absence of loss and damage will continue to be used as measurement factors. Those carriers meeting or exceeding the average shipment score of 85 will be qualified for traffic under TCT. Those carriers who score below an 85 will be considered unsatisfactory and placed in traffic denial status for 60 days. [Ref. 38:p. 2]

The following example, initially developed for testing at the Joint Personal Property Shipping Office (JPPSO), San Antonio, TX, will illustrate how the TCT program is supposed to work. First, carriers will continue to file rates in accordance with the existing CONUS Automated Rate System (CARTS). Second, claims costs are derived from the actual adjudicated claims dollars paid to the member for loss or damages. Adjudicated claim amounts are calculated at the destination by the responsible claims office. This information will then be forwarded through the normal reporting channels of the respective military services and

then finally to MTMC Headquarters. Third, selected portions of the claims data will then be provided to the origin ITO. Fourth, one month prior to each rate cycle (October for the November--April cycle and April for the May--October cycle), all claims data (Codes 1 and 2) will be tabulated for each individual carrier serving an installation and a claims index will be determined. This TCT claims index will apply to that individual carrier for all Code 1 and 2 shipments to all locations. Fifth, the claims index will then be added to the rate filed by the carrier. This rate will be a dollar value expressed in costs per hundredweight. For example:

<u>CARRIER</u>	<u>DESTINATION</u>	<u>RATE/CWT</u>	<u>CLAIMS INDEX</u>	<u>TOTAL TCT</u>
ABC	CA	10.00	3.75	13.75
ABC	MS	11.25	3.75	15.00
ABC	UT	10.50	3.75	14.25

Once each carrier's TCT is determined, the sixth step is ranking the carriers on a TCT TDR. This is accomplished by comparing and ranking the TCT of all eligible carriers serving the same destination. The carrier with the lowest overall TCT cost, who is fully qualified under CERS, is ranked first and is awarded the shipments. Traffic award will be made to the lowest TCT cost carrier until the carrier cannot handle any more traffic or refuses a shipment. At that point, if traffic is still available, it will go to the next carrier on the TCT TDR. The traffic allocation process

will continue until all traffic is allocated for that day.

An example of a TCT traffic award follows:

<u>CARRIER</u>	<u>DESTINATION</u>	<u>EST WT</u>	<u>RATE/CWT</u>	<u>CLAIMS INDEX</u>	<u>TCT</u>
ABC	GA	5000	24.00	3.75	27.75
BCD	GA	5000	24.50	3.22	27.72
WOW	GA	5000	25.00	2.70	27.70

For the TCT TDR above, carrier WOW would receive the shipment based on lowest total cost (TCT). If WOW could not handle the shipment, then BCD would be awarded the shipment.

There are a number of advantages and disadvantages to the TCT program. The major advantage is that by using actual claims data in conjunction with transportation costs and CERS, TCT would truly allocate traffic in most situations to the lowest total cost carriers. Second, TCT would essentially abolish the current "me too" rate filing. Carriers could continue to file "me too" rates for their line haul rate, but they could not "me too" the claims indexes as this information would not be given out to carriers until after rates are submitted. [Ref. 37:p. 6]

The major disadvantage is that in order for the TCT to work, it must be accomplished in an automated environment. It cannot be implemented until all TOPS sites are fully operational and the military claims offices automate their claims processing and reporting procedures. A second major limitation is the claims data index is calculated using 12 months of adjudicated claims data. Claims data used for TCT

rates should be collected on all shipments made by a carrier over a two year period. This equals the time frame in which a member can make a claim against the government and carrier for loss or damage.

This section discussed two new initiatives that have been developed to assist local and national military personal property managers in evaluating and controlling carrier service. Both programs put the onus back on the carrier to ensure that proper moving service is provided. If proper moving service is not provided, the carrier, not the government, suffers.

#### G. CONCLUSION

Chapter V identified some of the major weaknesses of the current CERS program and suggested some ways to improve the CERS process. What was covered is by no means an exhaustive listing of what can be done to improve a military move. The Military Traffic Management Command, its field offices, and local ITOs are constantly developing new and innovative programs to improve moving services for the service member.

## VI. CONCLUSIONS AND RECOMMENDATIONS

### A. INTRODUCTION

This thesis has examined the history, development, and current status of the primary quality assurance tool available to DOD personal property managers to monitor and evaluate carrier performance--the Carrier Evaluation and Reporting System. In addition, several past, current, and future alternative quality assurance initiatives were discussed.

Chapter VI presents major conclusions and recommendations based on the research results. This chapter will conclude with suggestions of areas for further research.

### B. CONCLUSIONS

#### 1. Conclusion #1:

With the possible exception of on-time pickup, the Carrier Evaluation and Reporting System has not had any significant impact on improving moving service.

Carrier Evaluation and Reporting System statistics since 1984 are not impressive as the incidence of late delivery continues to exceed pre-established goals and approximately 22 to 25 percent of all shipments still experience loss and damage. The Military Traffic Management Command needs to put more emphasis into these two performance elements. A no-tolerance rule such as that used with on-time



pickup would probably be unreasonable as late delivery or most probably loss and damage will occur no matter what preventive steps are taken. However, stronger messages must be sent to the nation's household goods carriers that poor moving service will no longer be tolerated. The revised Carrier Evaluation and Reporting System does not send the necessary message(s) to movers to improve in the areas of on-time delivery and loss and damage.

2. Conclusion #2:

The requirement to distribute traffic to carriers offering the lowest rate limits CERS effectiveness.

Marginal performers can continue to participate and be awarded the bulk of shipments if they submit low rates. As previously stated, the Military Traffic Management Command's official traffic allocation policy is to award traffic to those carriers who meet quality service standards at the lowest overall cost to the government. Unfortunately, MTMC's definition of lowest overall cost does not include loss or damage claim information. Loss and damage claims data, estimated and actual, are available and should be used when determining overall costs for traffic allocation.

3. Conclusion #3:

The Carrier Evaluation and Reporting System was the only system examined in this study that did not use customer feedback in its program.

While customer feedback can often be highly subjective and emotional, it can also provide the personal property manager with important information that can be used to monitor and improve carrier performance. Many DOD officials interviewed felt that formal customer feedback using the Customer Satisfaction Report--DD Form 1781 was a valuable part of their quality assurance/quality control programs and could be used in conjunction with other management techniques as a way to persuade a carrier to improve its performance.

#### C. RECOMMENDATIONS

##### 1. Recommendation #1:

##### Implement Total Cost Transportation.

Implementing Total Cost Transportation would correct two significant shortcomings with the CERS program. First, TCT would utilize actual vice estimated claims information as a means of sorting out carriers. Second, TCT would award traffic to the true low overall cost carrier. Total Cost Transportation would allocate shipments according to service ability and price as per the goals of the military's personal property program.

Total Cost Transportation cannot be initiated until all personal property activities are automated via TOPS. This should occur by the early 1990's. In the interim, MTMC

or the Air Force should develop TCT software to be used with the TOPS system.

2. Recommendation #2:

Put the service member back in as an active participant in the carrier evaluation process.

This can be accomplished by re-implementing the DD Form 1781 or establishing a formal method for gathering feedback from those most affected in any move. The service member deserves a voice in the move evaluation process. After all, it's the service member's belongings that are being moved.

3. Recommendation #3:

ITOs, quality control, and CERS personnel need more and better training.

Department of Defense Personnel need to be better trained on:

- a. Carrier Evaluation and Reporting System paperwork preparation and submission.
- b. How to use existing regulations when faced with tender of service and other customer service violations. The existing regulations are fairly explicit concerning flagrant tender of service violations. What many ITOs need training on is how to apply the existing regulations when minor or "grey area" problems are encountered.

In addition, MTMC should develop an exportable quality assurance/CERS training course. This course can be developed and taught using the TOPS system or video tape format. An exportable course combined with formal training

at the service schools would fill the training gap that currently exists in the quality assurance/CERS area. The Military Traffic Management Command should also review the quality assurance curriculums being taught at the service schools to ensure that all DOD personnel are being instructed in the same CERS and quality assurance procedures.

4. Recommendation #4:

Revise scoring criteria for pickup and delivery to or from a Storage-In-Transit (SIT) facility.

The Carrier Evaluation and Reporting System should concentrate on those items which impact on service to the service member. If missing delivery or pickup to or from the SIT facility does not affect the member, i.e., his/her household goods still arrive on time, a carrier should receive full CERS points for these performance elements (if original pickup and delivery to the member are on time). Missed delivery or pickup to or from the SIT facility could be dealt with as a standard contract violation.

D. SUGGESTIONS FOR FURTHER RESEARCH

1. Further research should be done to determine the effect(s) of the New Released Valuation Program on moving service and the moving industry.
2. Further research should be conducted in the domestic rate acquisition area. Specifically, additional research is needed to study the effect rates have on moving service and quality, and what effect, if any, would there be if a rate floor was established in the domestic program.

3. Further research should be done to determine the cause(s) of late delivery and loss and damage and to assess what can be done by the both DOD and the moving industry to improve performance in these two areas.
4. Further research should be accomplished comparing performance elements (pickup, delivery, and loss and damage) between DOD and non-DOD moves.

## APPENDIX A

### GLOSSARY

Agent, Carrier's. A business firm, corporation, or individual acting for or in behalf of a carrier. A bona fide agent of a personal property carrier, as distinguished from a broker, is a person who, or business enterprise which, represents and acts for a motor carrier or freight forwarder and performs its duties under the direction of the carrier pursuant to a preexisting agreement with the carrier, providing for a continuing relationship between them. [Ref. 2:p. ix]

Carrier. A business entity that holds appropriate State or Federal permits or certificate for the movement of personal property and/or mobile home. [Ref. 2:p. x]

Carrier, DOD-Approved. An carrier, as defined above, approved by the Commander, MTMC, for participation in the DOD Personal Property Shipment and Storage Program. [Ref. 2:p. x]

#### Domestic Codes of Service:

a. Domestic Motor Van (Code 1). Movement of household goods in a motor van from origin residence in CONUS to destination residence within CONUS. [Ref. 2:p. xi]

b. Domestic Container (Code 2). Movement of household goods in containers from origin residence in CONUS to destination residence within CONUS. [Ref. 2:p. xi]

Continental United States (CONUS). As used in connection with household goods, includes all areas within the United States, excluding Hawaii. [Ref. 2:p. xii]

Direct Procurement Method (DPM). A method of shipment in which the Government manages the shipment throughout. Packing, containerization, local drayage, and storage services are obtained from commercial firms under contractual arrangements or by the use of Government facilities and personnel. [Ref. 2:p. xiii]

Disqualification. Action taken by the Commander, MTMC, which results in the exclusion of the carrier or storage firm from participation in the DOD Personal Property Shipment and Storage Program at one or more installations for a definite or indefinite period of time. [Ref. 2:p. xiii]

Freight Forwarder. A carrier that collects small shipments from shippers, consolidates that small shipments, and used a basic mode to transport these consolidated shipments to a destination where the freight forwarder delivers the shipment to the consignee. [Ref. 39:p. 507]

Household Goods. Furniture, furnishings, or equipment; clothing; baggage; personal effects; professional books, papers, and equipment; and all other personal property associated with the home and person, as defined in the Joint Federal Travel Regulations (JFTR). [Ref. 2:p. xv]

Household Goods Domestic Rate Solicitation. An acquisition procedure for the solicitation of rates for domestic shipment of DOD household goods that requires the submission of individual rate tenders by individual carriers through independent action. The government solicitation contains terms, conditions, base-line rates, and other charges. [Ref. 2:pp. xxi-xxii]

Individual Rate Tender (IRT). An IRT is a voluntary submission of rates and charges based on a percentage of HHG Domestic Rate Solicitation. Carriers may file percentages above, below, or equal to baseline rates established in the Rate Solicitation. [Ref. 2:p. xv]

Installation Transportation Officer (ITO). The individual designated by appropriate authority to perform assigned personal property traffic management functions at an installation or activity, regardless of whether or not that is the organizational title of the individual. [Ref. 2:p. xv]

Interstate Shipment. Any personal property shipment originating in a state or the District of Columbia and destined for another state or District of Columbia (moves within the District of Columbia are local moves and do not fit the intrastate or interstate categories. [Ref. 2:p. xv]

Intrastate Shipment. Any personal property shipment originating in a state destined for the same state and transiting only in that state. [Ref. 2:p. xvi]

Letter of Intent (LOI). A valid LOI is a document which is properly prepared and current with accurate information and has been accepted by the PPSO concerned. It must designate an agent with an approved facility, personnel, and equipment within the PPSO's area of responsibility. The carrier must possess appropriate regulatory operating authority and MTMC approvals. [Ref. 2:p. xvi]

Me-Too Rate. A rate filed by a competing carrier that is equal to a rate established by another carrier. [Ref. 2:p. xxi]

Military Traffic Management Command (MTMC). The single manager operating agency for military traffic, land transportation, and common-user ocean terminals. [Ref. 40:p. 93]

Personal Property. Household goods, unaccompanied baggage, privately owned vehicles, and mobile homes as defined in the Joint Federal Travel Regulations. [Ref. 2:p. xviii]

Personal Property Shipping Office (PPSO). An office designated to provide traffic management, counseling, and application processing for all Military Services on an area basis. [Ref. 2:p. xix]

Rate Cycles. Specified times announced by the Commander, MTMC, during which DOD-approved carriers may file rates. Rates accepted by the Commander, MTMC, during rate cycles normally are effective for 6-month traffic distribution periods beginning May 1 and November 1 for domestic traffic. [Ref. 2:p. xxi]

Required Delivery Date (RDD). A specified calendar date (excluding Saturdays, Sundays, and U.S. holidays) on or before which the carrier agrees to deliver the entire shipment of personal property to the member, member's agent, or responsible authority at destination. [Ref. 2:p. xxii]

Section 10721 Rate. A rate governed by Section 10721 of the Interstate Commerce Act that permits carriers to offer free or reduced rates for transportation services to Federal, State, or local governments and to certain other public organizations. [Ref. 2:p. xxii]

Through Government Bill of Lading. A single Personal Property Government Bill of Lading issued to a commercial carrier to acquire transportation and related services for a shipment of household goods from origin to destination. A domestic TGBL is the movement of personal property from one point in CONUS to another point in CONUS by use of a DOD-approved common carrier. The carrier is responsible for arranging or performing all required services incident to movement. Such services include the preparation of an inventory, packing, appliance servicing, pickup at origin (residence or storage) location, line-haul transportation, storage in transit (SIT), and unpacking. [Ref. 2:p. xxiv]



Traffic Distribution Period. A 6-month period during which traffic is tendered. The normal traffic distribution periods are 1 May through 31 October and 1 November through 30 April for domestic traffic. [Ref. 2:p. xxiv]

Suspension. An action taken by an ITO to temporarily halt distribution of personal property shipments to an agent or carrier serving a specific installation. [Ref. 2:p. xxiii]

Tender. A document providing quotations to the Government based upon special rules, regulations, rates, and charges applicable to personal property shipments. [Ref. 2:p. xxiii]

## APPENDIX B

### ACRONYMS

CERS-Carrier Evaluation and Reporting System

CONUS-Continental United States

DOD-Department of Defense

HHG-Household goods

ITO-Installation Transportation Officer

JPPSO-Joint Personal Property Shipping Office

LOI-Letter of Intent

MTMC-Military Traffic Management Command

MTMCWA-Military Traffic Management Command Western Area

PPSO-Personal Property Shipping Office

PPTMR-Personal Property Traffic Management Regulation

RDD-Required Delivery Date

SIT-Storage in Transit

TCT-Total Cost Transportation

TDR-Traffic Distribution Record

TGBL-Through Government Bill of Lading

## APPENDIX C

### FIRMS AND DOD OFFICES CONTACTED

#### Private Industry:

Hewlett-Packard  
Minnesota Mining and Manufacturing (3M)  
Bristol-Myers  
Welchs' Foods  
General Motors-Argonaut Realty  
Tenneco  
Boeing  
International Business Machines  
Exxon

#### Industry Groups:

American Movers Conference  
Household Goods Carriers' Bureau  
Household Goods Forwarders' Association  
4 local carriers  
North American Van Lines  
Allied Van Lines  
United Van Lines  
Atlas Van Lines

#### Military:

Military Traffic Management Command  
Military Traffic Management Command Western Area  
Air Force, Directorate of Personal Property  
Naval Supply Systems Command (code 053)  
Fort Bragg (NC)  
Keesler AFB (MS)  
NSC Charleston (SC)  
McConnell AFB (KS)  
Fort Dix (NJ)  
Offutt AFB (NB)  
Hill AFB (UT)  
Travis AFB (CA)  
JPPSO Colorado Springs (CO)  
NSC Oakland (CA)  
Sharpe Army Depot (CA)  
F. E. Warren AFB (WY)  
Fort McPherson (GA)  
Langley AFB (VA)  
Fort Ord (CA)  
NAS Whidbey Island (WA)

Naval Postgraduate School (CA)  
NSC Puget Sound (WA)  
NSC San Diego (CA)  
Grissom AFB (IN)  
Fort Leavenworth (KS)  
Naval Weapons Station Crane (IN)  
Fort Chaffee (AR)  
NSC Norfolk (VA)  
Fort Eustis (VA) (Transportation School)  
Naval Transportation School, Oakland (CA)  
JPPSO San Antonio (TX)  
McChord AFB (WA)  
Fort Lewis (WA)  
Fairchild AFB (WA)

Other Agencies:

California Department of General Services  
California Public Utilities Commission  
General Services Administration  
Employees Relocation Council  
Council of Logistics Management

## LIST OF REFERENCES

1. Jordana, Modesto and Garrity, Robert E., An Analysis of the Effectiveness of the Suspension Policy as a Tool to Insure High Quality Service in the Movement of Air Force Personal Property, Master's Thesis, Air Force Institute of Technology, Wright-Patterson AFB, OH, August 1968. (LD 49582)
2. Department of Defense Instruction 4500.34R, "Personal Property Traffic Management Regulation," December 1, 1987.
3. Simon, Julian L., Basic Research Methods in Social Science, 2d ed., Random House, Inc., New York, NY, 1978.
4. Marshall, Edwin R. Jr., "A Study of Industry-Military Relations in the DOD Household Goods Movement Program," study presented to United Van Lines in partial fulfillment of the Department of the Army Training with Industry Program, June 1980. (LD 46696A)
5. Dubois, Raymond E., "A Study of the Department of Defense Procedures for Determination of Household Goods Shipments to Carriers," study presented to United Van Lines in partial fulfillment of the Department of the Army Training with Industry Program, June 1975. (LD 33880A)
6. Figueroa, Andrew Edmond, An Analysis of the Department of Defense Carrier Evaluation and Reporting System, Master's Thesis, Midwestern State University, Wichita Falls, TX, July 1983. (LD 056414A)
7. Bell, Thomas L., "The Three Dimensions of WHIST: A Major Management Tool," Navy Supply Corps Newsletter, v. 30, pp. 17-19, March 1967.
8. Telephone conversation between Ronald V. Claussen, MTW-IN, Military Traffic Management Command Western Area, and the author, September 23, 1988.
9. United States General Accounting Office, "DOD's Carrier Evaluation and Reporting System," (LCD-81-6), October 6, 1980. (LD 47740A)
10. McGuire, Roger F., "CERS--Commitment to Quality," Translog, v. 8, pp. 2-5, November 1977.

11. Jebo, Steven W., "WHIST What??" Translog, v. 16, pp. 6-7, June 1985.
12. Telephone conversation between Alfred A. Brown, NAVSUP Code 053, Naval Supply Systems Command, and the author, August 11, 1988.
13. Military Traffic Management Command Western Area, "Welcome to the Care and Maintenance of TDRs," February 1988.
14. Telephone conversation between Betty Wells, MTM-PPT, Military Traffic Management Command, and the author, February 10, 1988.
15. American Movers Council, Profiles of America's Moving Industry, 1987.
16. Military Traffic Management Command, Traffic Management Progress Reports, RCS DD-M(Q) 493, 1985-1988.
17. Interview between Billie R. Shepherd, Code 421, Naval Postgraduate School Personal Property, and the author, May 12, 1988.
18. CDRMTMC Falls Church, VA, Department of Defense Message, Subject: Traffic Management Advisory Message SER-PPQ-88-12 DD Form 1840, 182030Z May 88.
19. Interview between Stan Smith, Fort Ord Personal Property, and the author, August 5, 1988.
20. Telephone conversation with Guadalupe Jaurez, Naval Transportation Management School, and the author, October 4, 1988.
21. Galluzzo, Frank, "HHG Transportation in the 80's," Translog, v. 15, pp. 1-3, February 1984.
22. United States General Accounting Office, "Household Goods--DOD's Program for Obtaining Moving Rates," NSIAD-86-77, March 20, 1986. (LD 66831A)
23. Military Traffic Management Command, Domestic and Mobile Home Personal Property Carrier Approvals, Falls Church, VA, November 1, 1988.
24. Interview between Dorothy Herbert, Fort Ord Personal Property, and the author, August 5, 1988.

25. Weiss, Neil A., and Hassett, Matthew J., Introductory Statistics, 2d ed., Addison-Wesley Publishing Co., 1987.
26. Telephone conversation between Arthur J. Coradine, MTW-PP, Military Traffic Management Command Western Area, and the author, October 14, 1988.
27. United States Department of Defense, Armed Forces Information Service, It's Your Move, Government Printing Office, Washington, DC, 1987.
28. Holloway, Reginald N., "A Study to Examine the Continuing Need for a Customer Satisfaction Comment forum in the Movement of Personal Property for the Military Services," a study presented to United Van Lines in partial fulfillment of the Department of the Army Training with Industry Program, June 1988.
29. Interview between Helen Chamberlin, TOPS Project Management Team, Military Traffic Management Command and the author, October 27, 1988.
30. United States General Accounting Office, "DOD's Revised Carrier Evaluation and Reporting System May Not BE Needed," PLRD-82-70, May 27, 1982. (LD 052187A)
31. Military Traffic Management Command, Personal Property Directorate, International Carrier Evaluation and Reporting System (ICERS), June 1, 1987.
32. Telephone conversation between Al Altman, Household Goods Carrier Coordinator, Minnesota, Mining, and Manufacturing, and the author, November 4, 1988.
33. Telephone conversation between Bill Posselte, Senior Distribution Planner, International Business Machines, and the author, November 8, 1988.
34. Telephone conversation between Nolan H. Anderson, Jr., Division Chief, Management Information and Plans Division, Joint Personal Property Office-San Antonio, TX, and the author, August 31, 1988.
35. United States General Accounting Office, "Household Goods--Implications of Increasing Moving Companies' Liability for DOD Shipments," NSIAD-88-103, March 24, 1988.

36. Department of the Army, Office of the Deputy Chief of Staff for Logistics, UNCLASSIFIED Memorandum to all PPSOs/PPPOs, Subject: New Released Valuation at Government Expense and Increased Released Valuation Options at Member's Expense--Through Government Bill of Lading (TGBL) Personal Property Shipments, March 26, 1987.
37. Telephone conversation between Steve F. Fillo, III, MTMC-PPM, Military Traffic Management Command, and the author, November 15, 1988.
38. Department of the Air Force, Directorate of Transportation, Traffic Management Division, Personal Property Branch, Total Cost Transportation (TCT) Concept, August 25, 1988.
39. Coyle, J. J., Bardi, E. J., and Cavinato, J. L., Transportation, 2d ed., West Publishing Co., 1986.
40. Whitehurst, Clinton H., The Defense Transportation System--Competitor or Complement to the Private Sector? American Enterprise Institute for Public Policy Research, 1976.



## BIBLIOGRAPHY

"An Interview with MTMC's Gen. Stanford." Defense Transportation Journal, 44 (June 1988).

Athay, Robert E., and Thomas W. Heard. "Personal Property Movement and Storage Program." Research paper, Logistic Management Institute, Washington, DC. April 1984. (LD 58751)

Atlas Van Lines. Twenty-First Annual Survey of Corporate Relocation Policies. Evansville, IN: Atlas Van Lines, 1988.

Bastey, Mark F., Captain, USA. "A Comparison of Commercial Procedures Versus Department of Defense Requirements for International Household Goods Movement and the Impact of Those Requirements on the Moving Industry." Research paper, Department of the Army Training with Industry Program. July, 1979. (LD 44747A)

Breen, Dennis A. "The Basic Nature of Household Goods Carrier Operations: An Economic Analysis." Transportation Journal, 17 (Fall 1977).

Bruning, Edward R., and Peter M. Lynagh. "Carrier Evaluation in Physical Distribution Management." Journal of Business Logistics, 5 (1984).

Bruning, Edward R. "A Generalized Model of Carrier Evaluation." Research paper, Kent State University, 1982.

Chandler, John W., Captain, USAF, and Kenneth J. Utecht, Jr., Captain, USA. "Determination of Performance Characteristics for the United States Air Force Base level Households Section." Master's Thesis, Air Force Institute of Technology, Air University, Maxwell Air Force Base, AL. September 1972. (LD 28434)

Cooke, James A., and James J. Callari. "Carrier Evaluation-Shippers apply tough new standards." Traffic Management, 22 (February 1983).

Davis, Bob J., ed. An Annotated Bibliography of the Motor Carrier Industry. Washington, DC: The Operations Council, American Trucking Associations, Inc., 1976.

Estrin, Don. "Selecting and evaluating a van line? Not me!" Personnel Administrator, 30 (April 1985).

Galluzzo, Frank. "Trends in the Moving Industry." Translog, 2 (March 1988).

Harrington, L. "Deep Discounts Blamed For Movers' Woes." Traffic Management, 25 (July 1986).

Household Goods Carriers' Bureau. Transportation Fact Book. Alexandria, VA: Household Goods Carriers' Bureau, 1988.

McHugh, Mary Lou. "Revolutions in the Transportation World." Translog, 2 (January-February 1988).

"Moving Takes a Turn for the Better." Traffic Management, 24 (May 1985).

Quinn, Francis J. "Look What the Van Lines Are Up To!" Traffic Management, 26 (May 1987).

Stock, James R. "A Compendium of Doctoral Research in Logistic: 1970-1986." Journal of Business Logistics, 9 (1988).

Taylor, reese H., Jr. "The ICC in Transition." Movers Journal, 40 (December 1985).

Tyler, Hunter W., and Peter L. Mentis, Captain, USA. "Peak Season Movement of Household Goods." Research paper, United States Army Logistics Management Center, Logistics Studies Office. July 1979. (LD 42680A)

U.S. Congress. House. Committee of Public Works and Transportation. Subcommittee on Surface Transportation. Oversight of the Motor Carrier Act of 1980; The Household Goods Transportation Act of 1980; and the Bus Regulatory Reform Act of 1982. 98th Cong., 2d sess., 1983.

Vickery, Charles A., Brigadier General, USA. "Changes Faced by the Domestic Program." Translog, 2 (March 1988).

Waldman, Robert F. "Deregulation and Movement of Household Goods." Translog, 12 (June 1981).

Welty, James T. "Choosing the Mover for Your Company." Distribution Worldwide 73 (June 1974).

Whitehurst, Clinton H., Jr. The Defense Transportation System--Competitor or Complement to the Private Sector?  
Washington, DC: American Enterprise Institute for Public Policy Research, 1976.

Wood, Sonja. "Performance Standards Ensure Quality."  
Translog, 1 (April 1987).

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